XR-CA670X

SERVICE MANUAL

AEP Model
UK Model

Ver 1.0 2003.02

Model Name Using Similar Mechanism	XR-CA630X
Tape Transport Mechanism Type	MG-25M-136

SPECIFICATIONS

Cassette Player section

Tape track	4-track 2-channel stereo
Wow and flutter	0.08 % (WRMS)
Frequency response	30 – 18,000 Hz
Signal-to-noise ratio	

Cassette type	
TYPE II, IV	61 dB
TYPE I	58 dB

Tuner section

FM

Tuning range	87.5 – 108.0 MHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz/450 kHz
Usable sensitivity	9 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	67 dB (stereo), 69 dB (mono)
Harmonic distortion at 1 kHz	
	0.5 % (stereo), 0.3 % (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz

MW/LW

Tuning range	MW: 531 – 1,602 kHz LW: 153 – 279 kHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	MW: 30 µV LW: 40 µV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	50 W × 4 (at 4 ohms)

General

Outputs	Audio outputs (rear) Power aerial relay control lead Power amplifier control lead
Inputs	Telephone ATT control terminal BUS control input terminal BUS audio input terminal Remote controller input terminal Aerial input terminal
Tone controls	Low: ±10 dB at 60 Hz (XPLOD) Mid: ±10 dB at 1 kHz (XPLOD) High ±10 dB at 10 kHz (XPLOD)
Power requirements	12 V DC car battery (negative earth)
Dimensions	Approx. 178 × 50 × 180 mm (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 161 mm (w/h/d)
Mass	Approx. 1.2 kg
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1)

Note

This unit cannot be connected to a digital preamplifier or an equalizer which is Sony BUS system compatible.

Design and specifications are subject to change without notice.

FM/MW/LW CASSETTE CAR STEREO

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2003B0500-1
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e Vehicle Company
Published by Sony Engineering Corporation

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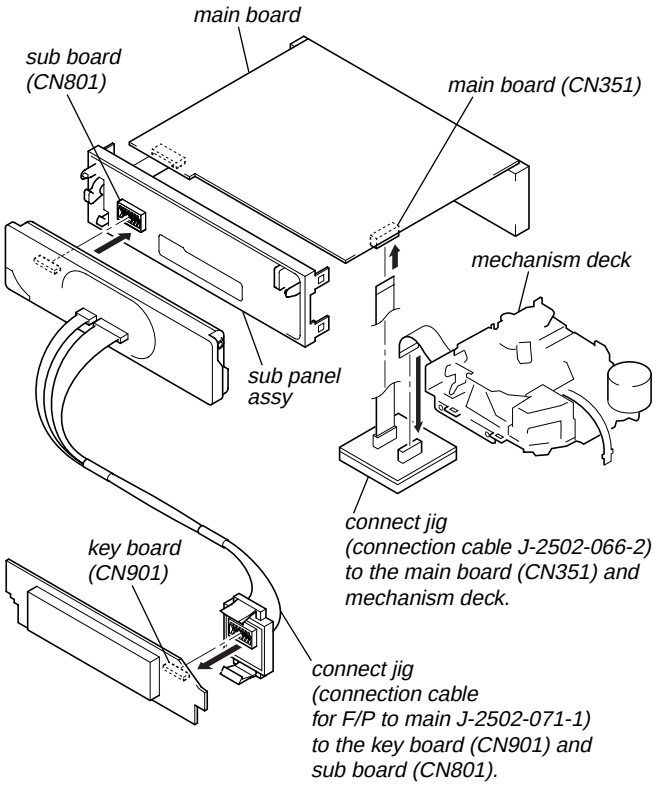
Notes on chip component replacement
- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing
- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

SERVICING NOTES

SERVICE POSITION

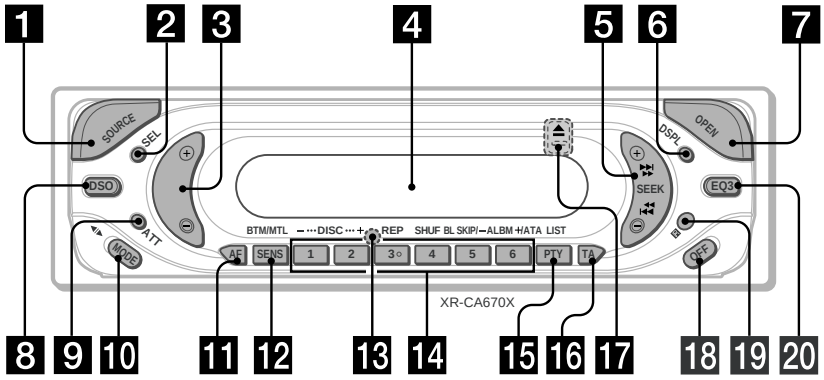
In checking the key board and main board, prepare two jigs (connection cable J-2502-066-2 and
connection cable for F/P to main J-2502-071-1).


main board
sub board (CN801)
main board (CN351)
mechanism deck
sub panel assy
connect jig (connection cable J-2502-066-2) to the main board (CN351) and mechanism deck.
key board (CN901)
connect jig (connection cable for F/P to main J-2502-071-1) to the key board (CN901) and sub board (CN801).

SECTION 1
GENERAL

This section is extracted from instruction manual.

Location of controls



1 SOURCE (Power on/Tape/Radio/CD/MD) button
Selecting the source
2 SEL (select) button
Selecting items.
3 Volume +/– button
4 Display window
5 SEEK +/– button
Tape:
Fast-forwarding, reversing a tape Automatic Music Sensor
Radio:
Tuning in stations automatically/finding a station manually.
CD/MD:
Skipping tracks/fast-forwarding, reversing a track.
6 DSPL (display mode change) button
7 OPEN button
8 DSO button
9 ATT (attenuate) button
10 MODE (◄I►) button
Changing the operation
11 AF button
12 SENS/BTM/MTL button
13 RESET button (located on the front side of the unit, behind the front panel)
14 Number buttons
Tape:
③**: REP**
⑤**: BL SKIP**
⑥**: ATA**
Radio:
Storing the desired station on each number button.
CD (MP3 files)/MD:
①**: DISC –**
②**: DISC +**
③**: REP**
④**: SHUF**
MP3 files:
⑤**: ALBM –**
⑥**: ALBM +**
15 PTY (programme type) /LIST button
16 TA button
17 ⏏ (eject) button (located on the front side of the unit, behind the front panel)
18 OFF (Stop/Power off) button*
19 Receptor for the card remote commander
20 EQ3 button

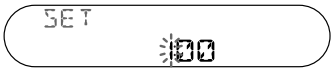
* **Warning when installing in a car without an ACC (accessory) position on the ignition switch**
After turning off the ignition, be sure to press and hold OFF on the unit until the display disappears.
Otherwise, the display does not turn off and this causes battery drain.

Setting the clock

The clock uses a 24-hour digital indication.

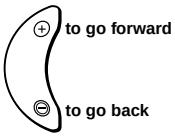
Example: To set the clock to 10:08

1 Press DSPL for 2 seconds.

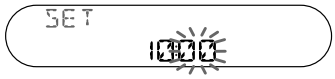


The hour indication flashes.

❶Press the volume +/– button to set the hour.

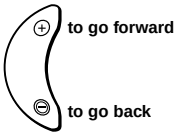


❷Press SEL.

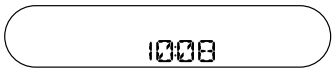


The minute indication flashes.

❸Press the volume +/– button to set the minute.



2 Press DSPL.

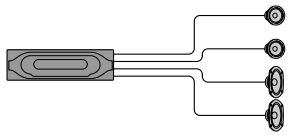


The clock starts.

After the clock setting is completed, the display returns to normal play mode.

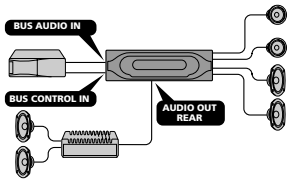
Tip
You can set the clock automatically with the RDS feature (page 15).

2 A

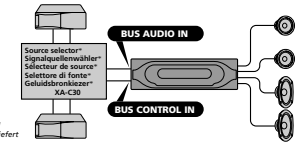


B

a



b



* not supplied
nicht mitgeliefert
non fourni
non in dotazione
niet bijgeleverd

Power connection diagram

Auxiliary power connector may vary depending on the car. Check your car's auxiliary power connector diagram to make sure the connections match correctly. There are three basic types (illustrated below). You may need to switch the positions of the red and yellow leads in the car stereo's power connecting cord.
After matching the connections and switched power supply leads correctly, connect the unit to the car's power supply. If you have any questions and problems connecting your unit that are not covered in this manual, please consult the car dealer.

Stromanschlussdiagramm

Der Hilfsstromanschluss kann je nach Fahrzeugtyp unterschiedlich sein. Sehen Sie im Hilfsstromanschlussdiagramm für Ihr Fahrzeug nach, wie die Verbindung ordnungsgemäß vorgenommen werden muss. Es gibt, wie unten abgebildet, drei grundlegende Typen.
Sie müssen möglicherweise die rote und gelbe Leitung des Stromversorgungskabels der Autostereoanlage vertauschen.
Stellen Sie die Anschlüsse her, schließen Sie die geschalteten Stromversorgungsleitungen richtig an und verbinden Sie dann das Gerät mit der Stromversorgung Ihres Fahrzeugs. Wenn beim Anschließen des Geräts Fragen oder Probleme auftreten, die in dieser Bedienungsanleitung nicht erläutert werden, wenden Sie sich bitte an den Autohändler.

Schéma de connexion d'alimentation

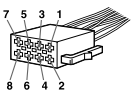
Le connecteur d'alimentation auxiliaire peut varier suivant le type de voiture. Vérifiez le schéma du connecteur d'alimentation auxiliaire de votre voiture pour vous assurer que les connexions correspondent. Il en existe trois types de base (illustrés ci-dessous). Il se peut que vous deviez commuter la position du fil rouge et jaune du cordon d'alimentation de l'autoradio.
Après avoir établi les connexions et commuté correctement les fils d'alimentation, raccordez l'appareil à l'alimentation de la voiture. Si vous avez des questions ou des difficultés à propos de cet appareil qui ne sont pas abordées dans le présent mode d'emploi, consultez votre revendeur automobile.

Diagramma dei collegamenti di alimentazione

Il connettore di alimentazione ausiliaria può variare a seconda della macchina.
Controllare il diagramma del connettore di alimentazione ausiliaria della macchina per essere sicuri che le connessioni corrispondano correttamente. Vi sono tre tipi di base (illustrazione sotto). Potrà essere necessario cambiare le posizioni dei cavi rosso e giallo nel cavo di alimentazione dello stereo della macchina. Dopo aver fatto corrispondere le connessioni e aver commutato i cavi di alimentazione, collegare l'apparecchio all'alimentazione della macchina. Se si hanno domande o se sorgono problemi che non sono stati trattati nel manuale relativi ai collegamenti dell'apparecchio, contattare l'autoconcessionario.

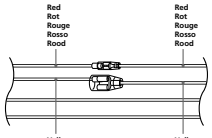
Voedingsaansluitschema

De hulpvoedingsaansluiting kan verschillen afhankelijk van de auto. Controleer het voedingsaansluitschema dat bij dit toestel wordt geleverd om te zien of de aansluitingen kloppen. Er zijn drie basistypes (zie illustratie hieronder). Het is mogelijk dat u de posities van de rode en gele kabels in het aansluitsnoer van het car audiosysteem moet omwisselen.
Als de aansluitingen en geschakelde voedingskabels kloppen, sluit u het toestel aan op de voeding van de auto. Indien u nog vragen of problemen hebt in verband met het aansluiten van het toestel die niet in deze handleiding vermeld staan, raadpleeg dan de autodealer.



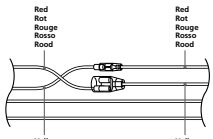
Auxiliary power connector
Hilfstromanschluss
Connecteur d'alimentation auxiliaire
Connettore di alimentazione ausiliaria
Hulpvoedingsaansluiting

a



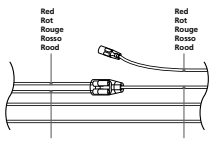
4	Yellow / Gelb / Jaune / Giallo / Geel	continuous power supply / permanente Stromversorgung / alimentation continue / alimentazione continua / continu voeding	7	Red / Rot / Rouge / Rosso / Rood	switched power supply / geschaltete Stromversorgung / alimentation commutée / alimentazione commutata / geschakelde voeding

b



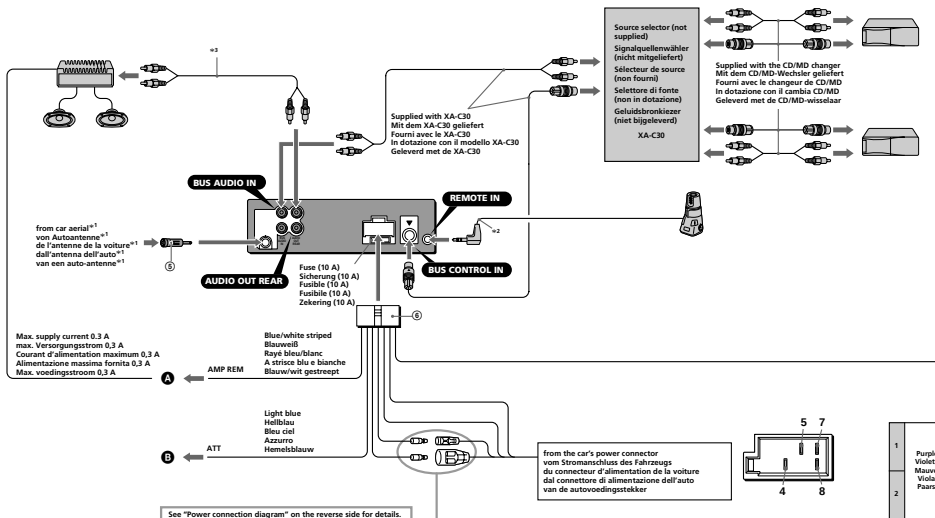
4	Yellow / Gelb / Jaune / Giallo / Geel	switched power supply / geschaltete Stromversorgung / alimentation commutée / alimentazione commutata / geschakelde voeding	7	Red / Rot / Rouge / Rosso / Rood	continuous power supply / permanente Stromversorgung / alimentation continue / alimentazione continua / continu voeding

c



the car without ACC position
Fahrzeug ohne Zubehörposition (ACC)
Voiture sans position ACC
macchina priva di posizione ACC
auto zonder ACC stand

3



*1 ***Note for the aerial connecting***
If your car aerial is an ISO (International Organisation for Standardisation) type, use the supplied adaptor (Ⓢ) to connect it. First connect the car aerial to the supplied adaptor, then connect it to the aerial jack of the master unit.
*2 ***Insert with the cord upwards***
** ***RCA pin cord (not supplied)***

*1 ***Hinweis zum Anschließen der Antenne***
Wenn Ihre Fahrzeugantenne der ISO-Norm (ISO = International Organization for Standardization - Internationale Normungsgemeinschaft) entspricht, schließen Sie sie mithilfe des mitgelieferten Adapters (Ⓢ) an. Verbinden Sie zuerst die Fahrzeugantenne mit dem mitgelieferten Adapter und verbinden Sie diesen dann mit der Antennenbuchse des Hauptgeräts.
*2 ***Mit dem Kabel nach oben einsetzen***
** ***Cinchkabel (nicht mitgeliefert)***

*1 ***Remarque sur le raccordement de l'antenne***
Si votre antenne de voiture est de type ISO (Organisation internationale de normalisation), utilisez l'adaptateur fourni (Ⓢ) pour la raccorder. Raccordez d'abord l'antenne de voiture à l'adaptateur fourni et, ensuite, à la prise d'antenne de l'appareil principal.
*2 ***Insérez avec le câble vers le haut***
** ***Cordon à broche RCA (non fourni)***

*1 ***Nota per il collegamento dell'antenna***
Se l'antenna dell'auto è di tipo ISO (International Organization Standardization), utilizzare l'adattatore (Ⓢ) in dotazione per collegarla. Collegare prima l'antenna della macchina all'adattatore in dotazione, quindi collegarla alla presa dell'antenna dell'apparecchio principale.
*2 ***Inserire con il cavo rivolto verso l'alto***
** ***Cavo a piedini RCA (non in dotazione)***

*1 ***Opmerking bij de antenne-aansluiting***
Indien uw auto is uitgerust met een antenne van het type ISO (International Organisation for Standardization), moet u die aansluiten met behulp van de meegeleverde adapter (Ⓢ). Sluit eerst de auto-antenne aan op de meegeleverde adapter en vervolgens de antennestekker op het hoofdtoestel.
*2 ***Plaatsen met het snoer naar boven***
** ***Tulpstekkersnoer (niet bijgeleverd)***

See "Power connection diagram" on the reverse side for details.
Näheres dazu finden Sie im „Stromanschlussdiagramm".
Blättern Sie dazu bitte um.
Voir le "Schéma de connexion d'alimentation" au verso pour plus de details.
Per ulteriori informazioni, vedere "Diagramma dei collegamenti di alimentazione" che si trova sul retro.
Zie "Voedingsaansluitschema" op de achterkant voor meer details.

4	Yellow / Gelb / Jaune / Giallo / Geel	continuous power supply / permanente Stromversorgung / alimentation continue / alimentazione continua / continu voeding	7	Red / Rot / Rouge / Rosso / Rood	switched power supply / geschaltete Stromversorgung / alimentation commutée / alimentazione commutata / geschakelde voeding
5	Blue / Blau / Bleu / Blu / Blauw	power aerial control / Motorantennensteuerung / commande d'antenne électrique / comando dell'antenna elettrica / automatische antenne	8	Black / Schwarz / Noir / Nero / Zwart	earth / Masse / masse / terra / aarding

Positions 1, 2, 3 and 6 do not have pins.
An Position 1, 2, 3 und 6 befinden sich keine Stifte.
Les positions 1, 2, 3 et 6 ne comportent pas de broches.
Le posizioni 1, 2, 3 e 6 non hanno piedini.
De posities 1, 2, 3 en 6 hebben geen pins.

1	Purple / Violett / Mauve / Viola / Paars	+	Speaker, Rear, Right / Lautsprecher hinten rechts / haut-parleur, arrière, droit / Diffusore, posteriore, destro / Luidspreker, achter, rechts	5	White / Weiß / Blanc / Bianco / Wit	+	Speaker, Front, Left / Lautsprecher vorne links / haut-parleur, avant, gauche / Diffusore, anteriore, sinistro / Luidspreker, voor, links
2		–	Speaker, Rear, Right / Lautsprecher hinten rechts / haut-parleur, arrière, droit / Diffusore, posteriore, destro / Luidspreker, achter, rechts	6		–	Speaker, Front, Left / Lautsprecher vorne links / haut-parleur, avant, gauche / Diffusore, anteriore, sinistro / Luidspreker, voor, links
3	Grey / Grau / Gris / Grigio / Grijs	+	Speaker, Front, Right / Lautsprecher vorne rechts / haut-parleur, avant, droit / Diffusore, anteriore, destro / Luidspreker, voor, rechts	7	Green / Grün / Vert / Verde / Groen	+	Speaker, Rear, Left / Lautsprecher hinten links / haut-parleur, arrière, gauche / Diffusore, posteriore, sinistro / Luidspreker, achter, links
4		–	Speaker, Front, Right / Lautsprecher vorne rechts / haut-parleur, avant, droit / Diffusore, anteriore, destro / Luidspreker, voor, rechts	8		–	Speaker, Rear, Left / Lautsprecher hinten links / haut-parleur, arrière, gauche / Diffusore, posteriore, sinistro / Luidspreker, achter, links

Negative polarity positions 2, 4, 6, and 8 have striped cords.
An den negativ gepolten Positionen 2, 4, 6 und 8 befinden sich gestreifte Adern.
Les positions de polarité négative 2, 4, 6 et 8 sont dotées de cordons rayés.
Le posizioni a polarità negativa 2, 4, 6 e 8 hanno cavi rigati.
De posities voor negatieve polariteit (2, 4, 6 en 8) hebben gestreepte kabels.

Cautions

- This unit is designed for negative earth 12 V DC operation only.
- Do not get the wires under a screw, or caught in moving parts (e.g. seat railing).
- Before making connections, turn the car ignition off to avoid short circuits.
- Connect the power connecting cord Ⓔ to the unit and speakers before connecting it to the auxiliary power connector.
- **Run all earth wires to a common earth point.**
- Be sure to insulate any loose unconnected wires with electrical tape for safety.

Notes on the power supply cord (yellow)

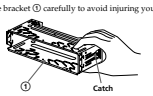
- When connecting this unit in combination with other stereo components, the connected car circuit's rating must be higher than the sum of each component's fuse.
- When no car circuits are rated high enough, connect the unit directly to the battery.

Parts list (1)

- The numbers in the list are keyed to those in the instructions.
- The bracket ① and the protection collar ④ are attached to the unit before shipping. Before mounting the unit, use the release keys ⑦ to remove the bracket ① and the protection collar ④ from the unit. For details, see "Removing the protection collar and the bracket (4)" on the reverse side of the sheet.
- **Keep the release keys ⑦ for the future use as they are also necessary if you remove the unit from your car.**

Caution

Handle the bracket ① carefully to avoid injuring your fingers.



Note

Before installing, make sure that the catches on both sides of the bracket ① are bent inwards 2 mm. If the catches are straight or bent outwards, the unit will not be installed securely and may spring out.

Connection example (2)

***Notes* (2-A)**

- *Be sure to connect the earth cord before connecting the amplifier.*
- *If you connect an optional power amplifier and do not use the built-in amplifier, the beep sound will be deactivated.*

***Tip* (2-B- 5)**

For connecting two or more CD/MD changers, the source selector XA-C30 (optional) is necessary.

Connection diagram (3)

Ⓐ **To AMP REMOTE IN of an optional power amplifier**
This connection is only for amplifiers. Connecting any other system may damage the unit.

Ⓑ **To the interface cable of a car telephone**

Warning

If you have a power aerial without a relay box, connecting this unit with the supplied power connecting cord Ⓔ may damage the aerial.

Notes on the control leads

- *The power aerial control lead (blue) supplies +12 V DC when you turn on the tuner or when you activate the AF (Alternative Frequency), TA (Traffic Announcement) function.*
- *When your car has built-in FM/MW/LW aerial in the rearside glass, connect the power aerial control lead (blue) or the accessory power input lead (red) to the power terminal of the existing aerial booster. For details, consult your dealer.*
- *A power aerial without a relay box cannot be used with this unit.*

Memory hold connection

When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection

- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the earth lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker wires installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker cords to each other.*

Note on connection

If speaker and amplifier are not connected correctly, "FAILURE" appears in the display. In this case, make sure the speaker and amplifier are connected correctly.

Vorsicht

- Dieses Gerät ist ausschließlich für den Betrieb bei 12 V Gleichstrom (negative Erdung) bestimmt.
- Achten Sie darauf, dass die Kabel nicht unter einer Schraube oder zwischen beweglichen Teilen wie z. B. in einer Sitzschiene eingeklemmt werden.
- Schalten Sie, bevor Sie irgendwelche Anschlüsse vornehmen, die Zündung des Fahrzeugs aus, um Kurzschlüsse zu vermeiden.
- Verbinden Sie das Stromversorgungskabel Ⓔ mit dem Gerät und den Lautsprechern, bevor Sie es mit dem Hilfsstromanschluss verbinden.
- **Schließen Sie alle Erdungskabel an einen gemeinsamen Massepunkt an.**
- Aus Sicherheitsgründen müssen alle losen, nicht angeschlossenen Drähte mit Isolierband isoliert werden.

Hinweise zum Stromversorgungskabel (gelb)

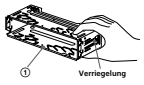
- Wenn Sie dieses Gerät zusammen mit anderen Stereokomponenten anschließen, muss der Autostromkreis, an den die Geräte angeschlossen sind, eine höhere Leistung aufweisen als die Summe der Sicherungen der einzelnen Komponenten.
- Wenn kein Autostromkreis eine so hohe Leistung aufweist, schließen Sie das Gerät direkt an die Batterie an.

Teileliste (1)

- Die Nummern in der Liste sind dieselben wie im Erläuterungstext.
- Die Halterung ① und die Schutzumrandung ④ werden vor dem Ausliefern am Gerät angebracht. Bevor Sie das Gerät montieren, nehmen Sie die Halterung ① und die Schutzumrandung ④ mithilfe der Löseschlüssel ⑦ bitte vom Gerät ab. Einzelheiten dazu finden Sie unter „Abnehmen der Schutzumrandung und der Halterung (4)" auf der Rückseite dieses Blattes.
- **Bewahren Sie die Löseschlüssel ⑦ für den späteren Gebrauch auf. Sie werden z. B. benötigt, wenn Sie das Gerät aus dem Fahrzeug ausbauen wollen.**

Sicherheitshinweis

Seien Sie beim Umgang mit der Halterung ① vorsichtig, damit Sie sich nicht die Hände verletzen.



Hinweis

Vergewissern Sie sich vor dem Installieren, dass die Verriegelungen an beiden Seiten der Halterung ① um 2 mm nach innen gebogen sind. Wenn die Verriegelungen gerade oder nach außen gebogen sind, lässt sich das Gerät nicht sicher installieren und kann herausspringen.

Anschlussbeispiel (2)

***Hinweise* (2-A)**

- *Schließen Sie unbedingt zuerst das Massekabel an, bevor Sie den Verstärker anschließen.*
- *Wenn Sie einen gesondert erhältlichen Endverstärker anschließen und den integrierten Verstärker nicht benutzen, wird der Signalton deaktiviert.*

***Tipp* (2-B- 5)**

Zum Anschließen von zwei oder mehr CD/MD-Wechslern wird der gesondert erhältliche Signalquellenwähler XA-C30 benötigt .

Anschlussdiagramm (3)

Ⓐ **An AMP REMOTE IN des gesondert erhältlichen Endverstärkers**
Dieser Anschluss ist ausschließlich für Verstärker gedacht. Schließen Sie nichts anderes daran an. Andernfalls kann das Gerät beschädigt werden.

Ⓑ **An Schnittstellenkabel eines Autotelefons**

Warnung

Wenn Sie eine Motorantenne ohne Relaiskästchen verwenden, kann durch Anschließen dieses Geräts mit dem mitgelieferten Stromversorgungskabel Ⓔ die Antenne beschädigt werden.

Hinweise zu den Steuerleitungen

- *Die Motorantennen-Steuerleitung (blau) liefert + 12 V Gleichstrom, wenn Sie den Tuner einschalten oder die AF- (Alternativfrequenzsuche) oder die TA-Funktion (Verkehrsdurchsagen) aktivieren.*
- *Wenn das Fahrzeug mit einer in der Heck-Seitenfensterscheibe integrierten FM (UKW)/MW/LW-Antenne ausgestattet ist, schließen Sie die Motorantennen-Steuerleitung (blau) oder die Zubehörstromversorgungsleitung (rot) an den Stromversorgungsanschluss des vorhandenen Antennenverstärkers an. Näheres dazu erfahren Sie bei Ihrem Händler.*
- *Es kann nur eine Motorantenne mit Relaiskästchen angeschlossen werden.*

Stromversorgung des Speichers

Wenn die gelbe Stromversorgungsleitung angeschlossen ist, wird der Speicher stets (auch bei ausgeschalteter Zündung) mit Strom versorgt.

Hinweise zum Lautsprecheranschluss

- *Schalten Sie das Gerät aus, bevor Sie die Lautsprecher anschließen.*
- *Verwenden Sie Lautsprecher mit einer Impedanz zwischen 4 und 8 Ohm und ausreichender Belastbarkeit. Ansonsten können die Lautsprecher beschädigt werden.*
- *Verbinden Sie die Lautsprecheranschlüsse nicht mit dem Wagenchassis und verbinden Sie auch nicht die Anschlüsse des rechten mit denen des linken Lautsprechers.*
- *Verbinden Sie die Masseleitung dieses Geräts nicht mit dem negativen (–) Lautsprecheranschluss.*
- *Versuchen Sie nicht, Lautsprecher parallel anzuschließen.*
- *An die Lautsprecheranschlüsse dieses Geräts dürfen nur Passivlautsprecher angeschlossen werden. Schließen Sie keine Aktivlautsprecher (Lautsprecher mit eingebauten Verstärkern) an, da das Gerät sonst beschädigt werden könnte.*
- *Um Fehlfunktionen zu vermeiden, verwenden Sie nicht die im Fahrzeug installierten, integrierten Lautsprecherleitungen, wenn am Ende eine gemeinsame negative (–) Leitung für den rechten und den linken Lautsprecher verwendet wird.*
- *Verbinden Sie nicht die Lautsprecherkabel des Geräts miteinander.*

Hinweis zum Anschließen

Wenn Lautsprecher und Verstärker nicht richtig angeschlossen sind, erscheint „FAILURE" im Display. Vergewissern Sie sich in diesem Fall, dass Lautsprecher und Verstärker richtig angeschlossen sind.

Précautions

- Cet appareil est conçu pour fonctionner sur un courant continu de 12 V avec une masse négative uniquement.
- Evitez de fixer des vis sur les câbles ou de coincer ceux-ci dans des pièces mobiles (par exemple, armature de siège).
- Avant d'effectuer des raccordements, éteignez le moteur pour éviter les courts-circuits.
- Branchez le cordon d'alimention Ⓔ sur l'appareil et les haut-parleurs avant de le brancher sur le connecteur d'alimentation auxiliaire.
- **Rassemblez tous les fils de terre en un point de masse commun.**
- Par mesure de sécurité, veillez à isoler tout fil ou câble non connecté avec du chatterton.

Remarques sur le cordon d'alimentation (jaune)

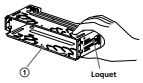
- Lorsque cet appareil est raccordé à d'autres appareils stéréo, la valeur nominale des circuits de la voiture raccordée doit être supérieure à la somme des fusibles de chaque appareil.
- Si aucun circuit de la voiture n'est assez puissant, raccordez directement l'appareil à la batterie.

Liste des composants (1)

- Les numéros de la liste correspondent à ceux des instructions.
- Le support ① et le tour de protection ④ sont fixés à l'appareil avant de quitter l'usine. Avant le montage de l'appareil, utilisez les clés de déblocage ⑦ pour détacher le support ① et le tour de protection ④ de l'appareil. Pour de plus amples informations, reportez-vous à la section "Retrait du tour de protection et du support (4)" au verso de la feuille.
- **Conservez les clés de déblocage ⑦ pour une utilisation ultérieure car vous en aurez également besoin pour retirer l'appareil de votre véhicule.**

Précaution

Manipulez précautionneusement le support ① pour éviter de vous blesser aux doigts.



Remarque

Avant l'installation, assurez-vous que les loquets des deux côtés du support ① sont bien pliés de 2 mm vers l'intérieur. Si les loquets sont droits ou pliés vers l'extérieur, l'appareil ne peut pas être fixé solidement et peut se détacher.

Exemple de raccordement (2)

***Remarques* (2-A)**

- *Raccordez d'abord le fil de masse avant de connecter l'amplificateur.*
- *Si vous raccordez un amplificateur de puissance en option et que vous n'utilisez pas l'amplificateur intégré, le bip sonore est désactivé.*

***Conseil* (2-B- 5)**

Dans le cas du raccordement de deux changeurs de CD/MD ou plus, le sélecteur de source XA-C30 (en option) est indispensable.

Schéma de connexion (3)

Ⓐ **Au niveau du AMP REMOTE IN d'un amplificateur de puissance en option**
Ce raccordement existe seulement pour les amplificateurs. Le raccordement à tout autre système peut endommager l'appareil.

Ⓑ **Vers le câble d'interface d'un téléphone de voiture**

Avertissement

Si vous disposez d'une antenne électrique sans boîtier de relais, le branchement de cet appareil au moyen du cordon d'alimentation fourni Ⓔ risque d'endommager l'antenne.

Remarques sur les fils de commande

- *Le fil de commande (bleu) fournit du courant continu de +12 V lorsque vous allumez le sélecteur de canaux ou lorsque vous activez la fonction TA (messages de radioguidage) en AF (fréquence alternative).*
- *Lorsque votre voiture est équipée d'une antenne FM/MW/LW intégrée dans la vitre arrière/latérale, raccordez le fil de commande de l'antenne (bleu) ou l'entrée d'alimentation des accessoires (rouge) à la borne de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre revendeur.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Connexion pour la conservation de la mémoire

Lorsque le fil d'entrée d'alimentation jaune est connecté, le circuit de la mémoire est alimenté en permanence même si la clé de contact est en position d'arrêt.

Remarques sur la connexion des haut-parleurs

- *Avant de raccorder les haut-parleurs, mettre l'appareil hors tension.*
- *Utiliser des haut-parleurs ayant une impédance de 4 à 8 ohms et une capacité adéquate sous peine de les endommager.*
- *Ne pas raccorder les bornes du système de haut-parleurs au châssis de la voiture et ne pas connecter les bornes du haut-parleur droit à celles du haut-parleur gauche.*
- *Ne pas raccorder le câble de masse de cet appareil à la borne négative (–) du haut-parleur.*
- *Ne pas tenter de raccorder les haut-parleurs en parallèle.*
- *Ne pas connecter d'enceintes actives (avec amplificateurs intégrés) aux bornes d'enceinte de cet appareil, pour éviter d'endommager l'appareil. Veiller à raccorder des enceintes passives uniquement.*
- *Pour éviter tout dysfonctionnement, ne pas utiliser pas les fils des haut-parleurs intégrés installés dans votre voiture si l'appareil dispose d'un fil négatif commun (–) pour les haut-parleurs droit et gauche.*
- *Ne pas raccorder entre eux les cordons des haut-parleurs de l'appareil.*

Remarque sur le raccordement

Si les enceintes et l'amplificateur ne sont pas raccordés correctement, le message "FAILURE" s'affiche. Dans ce cas, assurez-vous que les enceintes et l'amplificateur sont raccordés correctement.

Attenzione

- Questo apparecchio è stato progettato per l'uso solo a 12 V CC con massa negativa.
- Evitare che i cavi rimangano bloccati da una vite o incastrati nelle parti mobili (ad esempio nelle guide scorrevoli dei sedili).
- Prima di effettuare i collegamenti, spegnere il motore dell'automobile onde evitare di causare cortocircuiti.
- Collegare il cavo di collegamento dell'alimentazione Ⓔ all'apparecchio e ai diffusori prima di collegarlo al connettore di alimentazione ausiliare.
- **Portare tutti i cavi di massa a un punto di massa comune.**
- Per sicurezza, assicurarsi di isolare qualsiasi cavo non collegato mediante apposito nastro.

Note sul cavo di alimentazione (giallo)

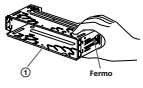
- Se questo apparecchio viene collegato in combinazione con altri componenti stereo, la potenza nominale dei circuiti dell'automobile collegati deve essere superiore a quella prodotta dalla somma dei fusibili di ciascun componente.
- Se la potenza nominale dei circuiti dell'automobile non è sufficiente, collegare l'apparecchio direttamente alla batteria.

Elenco dei componenti (1)

- I numeri nella lista corrispondono a quelli riportati nelle istruzioni.
- La staffa ① e la cornice di protezione ④ vengono applicati all'unità in fabbrica. Prima di installare l'unità, utilizzare le chiavi di rilascio ⑦ per rimuovere la staffa ① e la cornice di protezione ④ dall'apparecchio. Per ulteriori informazioni, vedere "Rimozione della staffa e della cornice di protezione (4)" sul lato opposto del foglio.
- **Conservare le chiavi di rilascio ⑦ per un uso futuro in quanto sono necessarie per rimuovere l'unità dall'auto.**

Attenzione

Maneggiare la staffa ① con cautela per evitare di ferirsi le mani.



Nota

Prima di installare l'unità, accertarsi di ripiegare i fermi presenti su entrambi i lati della staffa ① verso l'interno di 2 mm. Se i fermi sono diritti o ripiegati verso l'esterno, l'apparecchio non verrà installato in modo sicuro e potrebbe non essere salvo.

Esempi di collegamento (2)

***Note* (2-A)**

- *Assicurarsi di collegare il cavo di terra prima di collegare l'apparecchio all'amplificatore.*
- *Se si collega un amplificatore di potenza opzionale e non si utilizza l'amplificatore incorporato, il segnale acustico verrà disattivato.*

***Suggerimento* (2-B- 5)**

Per collegare due o più cambia CD/MD, si deve utilizzare il selettore di fonte XA-C30 (opzionale).

Schema di collegamento (3)

Ⓐ **A AMP REMOTE IN di un amplificatore di potenza opzionale**
Questo collegamento è riservato esclusivamente agli amplificatori. Non collegare un tipo di sistema diverso onde evitare di causare danni all'apparecchio.

Ⓑ **Al cavo di interfaccia di un telefono per auto**

Avvertenza

Quando si collega l'apparecchio con il cavo di alimentazione in dotazione Ⓔ, si potrebbe danneggiare l'antenna elettrica se questa non ha la scatola a relè.

Note sui cavi di controllo

- *Il cavo (blu) di controllo dell'antenna elettrica fornisce alimentazione pari a +12 V CC quando si attiva il sintonizzatore o le funzioni TA (notiziario sul traffico) e AF (frequenza alternativa).*
- *Se l'automobile è dotata di antenna FM/MW/LW incorporata nel vetro posteriore/laterale, collegare il cavo (blu) di controllo dell'antenna elettrica o il cavo (rosso) di ingresso dell'alimentazione opzionale al terminale di alimentazione del preamplificatore dell'antenna esistente. Per ulteriori informazioni, consultare il proprio fornitore.*
- *Non è possibile usare un'antenna elettrica senza scatola a relè con questo apparecchio.*

Collegamento per la conservazione della memoria

Quando il cavo di ingresso alimentazione giallo è collegato, viene sempre fornita alimentazione al circuito di memoria anche quando l'interruttore di accensione è spento.

Note sul collegamento dei diffusori

- *Prima di collegare i diffusori spegnere l'apparecchio.*
- *Usare diffusori di impedenza compresa tra 4 e 8 ohm e con capacità di potenza adeguata, onde evitare che vengano danneggiati.*
- *Non collegare i terminali del sistema diffusori al telaio dell'auto e non collegare i terminali del diffusore destro a quelli del diffusore sinistro.*
- *Non collegare il cavo di terra di questo apparecchio al terminale negativo (–) del diffusore.*
- *Non collegare i diffusori in parallelo.*
- *Assicurarsi di collegare soltanto diffusori passivi, poiché il collegamento di diffusori attivi, dotati di amplificatori incorporati, ai terminali dei diffusori potrebbe danneggiare l'apparecchio.*
- *Per evitare problemi di funzionamento, non utilizzare i cavi dei diffusori incorporati installati nell'automobile se l'apparecchio condivide un cavo comune negativo (–) per i diffusori destro e sinistro.*
- *Non collegare fra loro i cavi dei diffusori dell'apparecchio.*

Nota sul collegamento

Se l'amplificatore e il diffusore non sono collegati correttamente, "FAILURE" viene visualizzato nel display. In tal caso, accertarsi che l'amplificatore e il diffusore siano collegati correttamente.

Let op!

- Dit apparaat is ontworpen voor gebruik op gelijkstroom van een 12 Volts auto-accu, negatief geaard.
- Zorg ervoor dat de draden niet onder een schroef of tussen bewegende onderdelen (b.v. zetelrail) terechtkomen.
- Alvorens aansluitingen te verrichten moet u het contact uitzetten om kortsluiting te vermijden.
- Sluit het netsnoer Ⓔ aan op het toestel en de luidsprekers vooraleer u het op de hulpvoedingsaansluiting aansluit.
- **Sluit alle aarddraden op een gemeenschappelijk aardpunt aan.**
- Voorzie niet aangesloten draden om veiligheidsredenen altijd van isolatietape.

Opmerkingen bij de voedingskabel (geel)

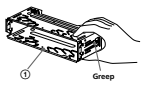
- Wanneer u dit toestel aansluit samen met andere componenten, moet het vermogen van de aangesloten autostroomkring groter zijn dan de som van de zekeringen van elke component afzonderlijk.
- Wanneer het vermogen ontoereikend is, moet u het toestel rechtstreeks aansluiten op de batterij.

Onderdelenlijst (1)

- De nummers in de afbeelding verwijzen naar die in de montage-aanwijzingen.
- De beugel ① en de beschermende rand ④ worden bevestigd op het toestel voordat dit wordt verzonden. Voordat u het toestel plaatst, moet u de ontgrendelingssleutels ⑦ gebruiken om de beugel ① en de beschermende rand ④ te verwijderen van het toestel. Zie "De beschermende rand en de beugel verwijderen (4)" aan de achterzijde van dit vel voor meer informatie.
- **Bewaar de ontgrendelingssleutels ⑦ voor toekomstig gebruik omdat u deze ook nodig hebt om het toestel uit de auto te verwijderen.**

Opgelet

Houd de beugel ① voorzichtig vast zodat u uw vingers niet verwondt.



Opmerking

Voordat u het toestel installeert, moet u de grepen aan beide zijden van de beugel ① 2 mm naar binnen buigen. Als de grepen recht zijn of naar buiten gebogen, kan het toestel niet goed worden bevestigd en kan dit losschieten.

Voorbeeldaansluitingen (2)

***Opmerkingen* (2-A)**

- *Sluit eerst de massakabel aan alvorens de versterker aan te sluiten.*
- *Als u een los verkrijgbare vermogensversterker aansluit en de ingebouwde versterker niet gebruikt, is de pieptoon uitgeschakeld.*

***Tip* (2-B- 5)**

Om twee of meer CD/MD-wisselaars aan te sluiten, hebt u de geluidsbronkiezer XA-C30 (optioneel) nodig.

Aansluitschema (3)

Ⓐ **Naar AMP REMOTE IN van een los verkrijgbare vermogensversterker**
Deze aansluiting is alleen bedoeld voor versterkers. Door een ander systeem aan te sluiten kan het toestel worden beschadigd.

Ⓑ **Naar het interface-snoer van een autotelefoon**

Opgelet

Indien u een elektrische antenne heeft zonder relaiskast, kan het aansluiten van deze eenheid met het bijgeleverde netsnoer Ⓔ de antenne beschadigen.

Opmerking betreffende de aansluitsnoeren

- *De antennevoedingskabel (blauw) levert +12 V gelijkstroom wanneer u de tuner aanschakelt of de AF (Alternative Frequency), TA (Traffic Announcement) functie activeert.*
- *Wanneer uw auto is uitgerust met een FM/MW/LW-antenne in de achterruitvloervuit, moet u de antennevoedingskabel (blauw) of de hulpvoedingskabel (rood) aansluiten op de voedingsingang van de bestaande antenneversterker. Raadpleeg uw dealer voor meer details.*
- *Met dit apparaat is het niet mogelijk een automatische antenne zonder relaishuis te gebruiken.*

Instandhouden van het geheugen

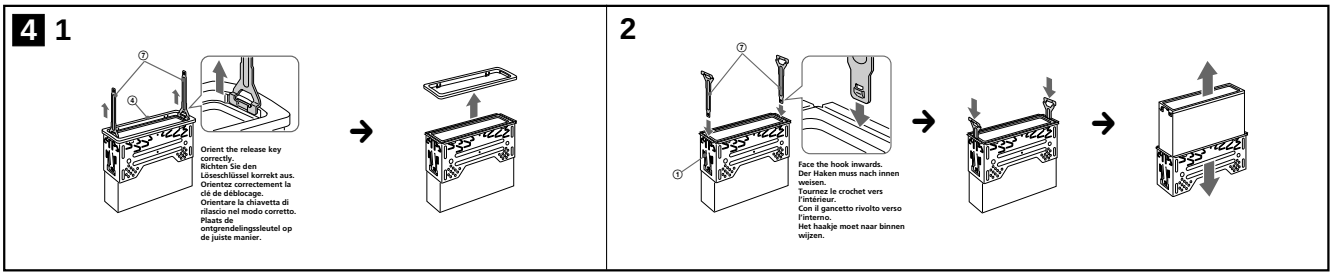
Zolang de gele stroomdraad is aangesloten, blijft de stroomvoorziening van het geheugen intact, ook wanneer het contact van de auto wordt uitgeschakeld.

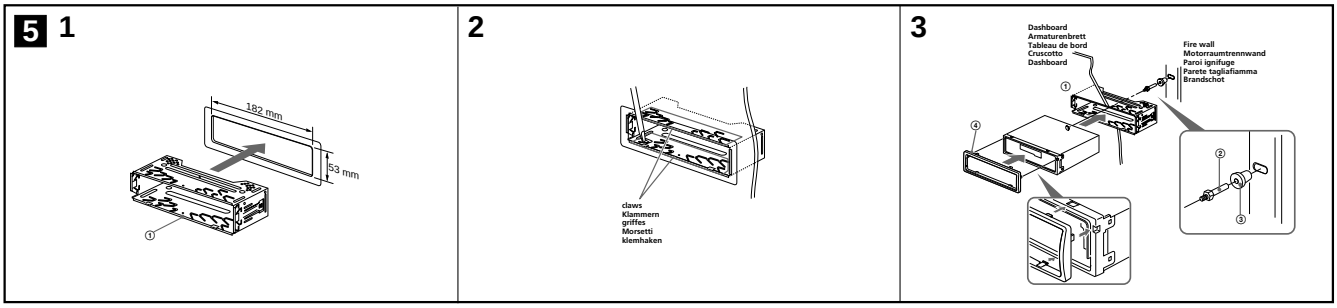
Opmerkingen betreffende het aansluiten van de luidsprekers

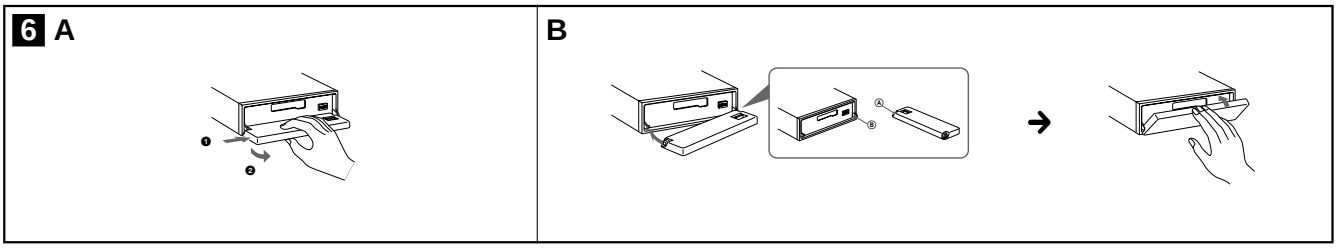
- *Zorg dat het apparaat is uitgeschakeld, alvorens de luidsprekers aan te sluiten.*
- *Gebruik luidsprekers met een impedantie van 4 tot 8 Ohm en let op dat die het vermogen van de versterker kunnen verwerken. Als dit wordt verzuimd, kunnen de luidsprekers ernstig beschadigd raken.*
- *Verbind in geen geval de aansluitingen van de luidsprekers met het chassis van de auto en sluit de aansluitingen van de rechter en linker luidspreker niet op elkaar aan.*
- *Verbind de massakabel van dit toestel niet met de negatieve (–) aansluiting van de luidspreker.*
- *Probeer nooit de luidsprekers parallel aan te sluiten.*
- *Sluit geen actieve luidsprekers (met ingebouwde versterkers) aan op de luidspreker-aansluiting van dit apparaat. Dit zal leiden tot beschadiging van de actieve luidsprekers. Sluit dus altijd uitsluitend luidsprekers zonder ingebouwde versterker aan.*
- *Om defecten te vermijden mag u de bestaande luidsprekerbedrading in uw auto niet gebruiken wanneer er een gemeenschappelijke negatieve (–) draad is voor de rechter en linker luidsprekers.*
- *Verbind de luidsprekerdraden niet met elkaar.*

Opmerking over aansluiten

Als de luidspreker en versterker niet correct zijn aangesloten, wordt "FAILURE" in het display weergegeven. In dit geval moet u zorgen dat de luidspreker en versterker correct zijn aangesloten.


4 1
Orient the release key correctly.
Richten Sie den Löseschlüssel korrekt aus.
Orientez correctement la clé de déblocage.
Orientare la chiavetta di rilascio nel modo corretto.
Plaats de ontgrendelingssleutel op de juiste manier.
2
Face the hook inwards.
Der Haken muss nach innen weisen.
Tournez le crochet vers l'intérieur.
Con il gancetto rivolto verso l'interno.
Het haakje moet naar binnen wijzen.





Precautions

- Choose the installation location carefully so that the unit will not interfere with normal driving operations.
- Avoid installing the unit in areas subject to dust, dirt, excessive vibration, or high temperature, such as in direct sunlight or near heater ducts.
- Use only the supplied mounting hardware for a safe and secure installation.

Mounting angle adjustment
Adjust the mounting angle to less than 20°.

Removing the protection collar and the bracket (4)

Before installing the unit, remove the protection collar ④ and the bracket ① from the unit.

1 Remove the protection collar ④.
❶ Engage the release keys ⑦ together with the protection collar ④.
❷ Pull out the release keys ⑦ to remove the protection collar ④.

2 Remove the bracket ①.
❶ Insert both release keys ⑦ together between the unit and the bracket ① until they click.
❷ Pull down the bracket ①, then pull up the unit to separate.

Mounting example (5)

Installation in the dashboard

Notes
- *Bend these claws outward for a tight fit, if necessary (5-2).*
- *Make sure that the 4 catches on the protection collar ④ are properly engaged in the slots of the unit (6-3).*

How to detach and attach the front panel (6)

Before installing the unit, detach the front panel.

6-A To detach
Before detaching the front panel, be sure to press (OFF). Press (OPEN), then slide the front panel to the right side, and pull out the left side.

6-B To attach
Place the hole Ⓐ in the front panel onto the spindle Ⓑ on the unit as illustrated, then push the left side in.

Warning when installing in a car without ACC (accessory) position on the ignition key switch

After turning off the ignition, be sure to press and hold (OFF) on the unit until the display disappears.
Otherwise, the display does not turn off and this causes battery drain.

RESET button

When the installation and connections are completed, be sure to press the RESET button with a ballpoint pen, etc., after detaching the front panel.

Vorsichtsmaßnahmen

- Wählen Sie den Einbauort sorgfältig so aus, dass das Gerät beim Fahren nicht hinderlich ist.
- Bauen Sie das Gerät so ein, dass es keinen hohen Temperaturen (keinem direkten Sonnenlicht, keiner Warmluft von der Heizung), keinem Staub, keinem Schmutz und keinen starken Vibrationen ausgesetzt ist.
- Für eine sichere Befestigung verwenden Sie stets nur die mitgelieferten Montageteile.

Hinweis zum Montagewinkel
Das Gerät sollte in einem Winkel von weniger als 20° montiert werden.

Abnehmen der Schutzumrandung und der Halterung (4)

Nehmen Sie vor dem Installieren des Geräts die Schutzumrandung ④ und die Halterung ① vom Gerät ab.

1 Entfernen Sie die Schutzumrandung ④.
❶ Setzen Sie beide Löseschlüssel ⑦ an der Schutzumrandung ④ an.
❷ Ziehen Sie die Schutzumrandung ④ mithilfe der Löseschlüssel ⑦ heraus.

2 Entfernen Sie die Halterung ①.
❶ Führen Sie beide Löseschlüssel ⑦ zwischen dem Gerät und der Halterung ① ein, bis sie mit einem Klicken einrasten.
❷ Ziehen Sie die Halterung ① nach unten und das Gerät nach oben, um die beiden zu trennen.

Montagebeispiel (5)

Installation im Armaturenbrett

Hinweise
- *Falls erforderlich, diese Klammern für einen sicheren Halt hochbiegen (5-2).*
- *Achten Sie darauf, die 4 Verriegelungen an der Schutzumrandung ④ korrekt in die Aussparungen am Gerät einzusetzen (6-3).*

Abnehmen und Anbringen der Frontplatte (6)

Nehmen Sie die Frontplatte vor dem Einbau des Geräts ab.

6-A Abnehmen
Schalten Sie das Gerät vor dem Abnehmen der Frontplatte unbedingt mit (OFF) aus. Drücken Sie (OPEN) und ziehen Sie sie auf sich zu heraus.

6-B Anbringen
Setzen Sie Teil Ⓐ der Frontplatte wie in der Abbildung dargestellt an Teil Ⓑ des Geräts an und drücken Sie die linke Seite der Frontplatte an, bis sie mit einem Klicken einrastet.

Warnhinweis zur Installation des Geräts in einem Auto mit Zündschloss ohne Zubehörposition ACC oder I

Nachdem Sie die Zündung ausgeschaltet haben, halten Sie am Gerät unbedingt (OFF) gedrückt, bis die Anzeige ausgeblendet wird.
Andernfalls wird die Anzeige nicht ausgeschaltet und der Autobatterie wird Strom entzogen.

Taste RESET

Wenn Sie das Gerät eingebaut und alle Anschlüsse vorgenommen haben, müssen Sie die Frontplatte abnehmen und mit einem Kugelschreiber oder einem anderen spitzen Gegenstand die Taste RESET drücken.

Précautions

- Choisir soigneusement l'emplacement de l'installation afin que l'appareil ne gêne pas la conduite normale du véhicule.
- Eviter d'installer l'appareil dans un endroit exposé à de la poussière, de la saleté, des vibrations violentes ou à des températures élevées, comme en plein soleil ou à proximité d'une bouche d'air chaud.
- Pour garantir un montage sûr, n'utiliser que le matériel de montage fourni.

Réglage de l'angle de montage
Ajuster l'inclinaison à un angle inférieur à 20°.

Retrait du tour de protection et du support (4)

Avant d'installer l'appareil, retirez le tour de protection ④ et le support ① de l'appareil.

1 Retirez le tour de protection ④.
❶ Accrochez les clés de déblocage ⑦ simultanément dans le tour de protection ④.
❷ Tirez sur les clés de déblocage ⑦ pour retirer le tour de protection ④.

2 Retirez le support ①.
❶ Insérez les deux clés de déblocage ⑦ simultanément entre l'appareil et le support ① jusqu'au déclic indiquant qu'elles sont en place.
❷ Tirez le support ① vers le bas, puis tirez l'appareil vers le haut pour les séparer.

Exemple de montage (5)

Installation dans le tableau de bord

Remarques
- *Plier ces griffes pour assurer une prise correcte si nécessaire (5-2).*
- *Assurez-vous que les 4 taquets du tour de protection ④ sont correctement insérés dans les fentes de l'appareil (6-3).*

Retrait et pose de la façade (6)

Avant d'installer l'appareil, déposer la façade.

6-A Retrait
Avant de déposer la façade, ne pas oublier d'appuyer sur (OFF). Appuyer ensuite sur (OPEN), puis faire glisser la façade vers la droite et extraire le côté gauche.

6-B Fixation
Fixer la partie Ⓐ de la façade sur la partie Ⓑ de l'appareil, comme indiqué sur l'illustration, puis appuyer sur le côté gauche jusqu'au déclic

Avertissement en cas d'installation dans une voiture dont le contact ne comporte pas de position ACC (accessoires)

Après avoir coupé le moteur, n'oubliez pas de maintenir la touche (OFF) sur l'appareil enfoncée jusqu'à ce que l'affichage disparaisse.
Sinon, l'affichage n'est pas désactivé et la batterie se décharge.

Touche RESET

Après avoir retiré la façade, une fois que l'installation et les raccordements sont terminés, appuyez sur la touche RESET avec un stylo à bille, etc.

Precauzioni

- Scegliere con attenzione la posizione per l'installazione in modo che l'apparecchio non interferisca con le operazioni di guida del conducente.
- Evitare di installare l'apparecchio dove sia soggetto ad alte temperature, come alla luce solare diretta o al getto di aria calda dell'impianto di riscaldamento, o dove possa essere soggetto a polvere, sporco e vibrazioni eccessive.
- Usare solo il materiale di montaggio in dotazione per un'installazione stabile e sicura.

Regolazione dell'angolo di montaggio
Regolare l'angolo di montaggio in modo che sia inferiore a 20°.

Rimozione della staffa e della cornice di protezione (4)

Prima di installare l'apparecchio, rimuovere la cornice di protezione ④ e la staffa ① dall'apparecchio.

1 Rimuovere la cornice di protezione ④.
❶ Inserire le chiavette di rilascio ⑦ insieme alla cornice di protezione ④.
❷ Per rimuovere la cornice di protezione ④, estrarre le chiavette di rilascio ⑦.

2 Rimuovere la staffa ①.
❶ Inserire contemporaneamente entrambe le chiavette di rilascio ⑦ tra l'apparecchio e la staffa ① fino a che non scattano in posizione.
❷ Estrarre la staffa ①, quindi sollevare l'apparecchio per rimuovere la staffa.

Esempio di montaggio (5)

Installazione nel cruscotto

Note
- *Piegare verso l'esterno questi morsetti per un'installazione più sicura, se necessario (5-2).*
- *Assicurarsi che i 4 fermi sulla cornice di protezione ④ siano correttamente inseriti negli alloggiamenti dell'apparecchio (6-3).*

Come rimuovere e reinserire il pannello anteriore (6)

Prima di installare l'apparecchio rimuovere il pannello anteriore.

6-A Per rimuoverlo
Prima di rimuovere il pannello anteriore, premere (OFF). Premere (OPEN), quindi tirare verso di sé il pannello anteriore.

6-B Per reinserirlo
Applicare la parte Ⓐ del pannello anteriore alla parte Ⓑ dell'apparecchio come mostrato nell'illustrazione e premere il lato sinistro fino a sentire uno scatto.

Informazioni importanti per quando si effettua l'installazione su un'auto sprovvista della posizione ACC sull'interruttore di accensione

Dopo avere spento il motore, assicurarsi di tenere premuto (OFF) sull'apparecchio finché il display non scompare.
Diversamente, il display non viene disattivato e questo potrebbe causare lo scaricamento della batteria.

Tasto RESET

Una volta rimosso il pannello anteriore e dopo aver terminato l'installazione e i collegamenti, assicurarsi di premere il tasto RESET con la punta di una penna a sfera, e così via.

Voorzorgsmaatregelen

- Kies de installatieplaats zorgvuldig zodat het toestel de bestuurder niet hindert tijdens het rijden.
- Installeer het apparaat niet op plaatsen waar het blootgesteld wordt aan hoge temperaturen, b.v. in direct zonlicht of bij de warme luchtstroom van de autoverwarming, aan sterke trillingen, of waar het in contact komt met veel stof of vuil.
- Gebruik voor het veilig en stevig monteren van het apparaat uitsluitend de bijgeleverde montage-onderdelen.

Maximale montagehoek
Installeer het apparaat nooit onder een hoek van meer dan 20° met het horizontale vlak.

De beschermende rand en de beugel verwijderen (4)

Voordat u het toestel gaat installeren, moet u de beschermende rand ④ en de beugel ① verwijderen van het toestel.

1 Verwijder de beschermende rand ④.
❶ Bevestig de ontgrendelingssleutels ⑦ op de beschermende rand ④.
❷ Trek de ontgrendelingssleutels ⑦ naar u toe om de beschermende rand ④ te verwijderen.

2 Verwijder de beugel ①.
❶ Plaats de ontgrendelingssleutels ⑦ tussen het toestel en de beugel ① tot deze vastklikken.
❷ Trek de beugel ① omlaag en trek het toestel omhoog om deze van elkaar te scheiden.

Montagevoorbeeld (5)

Montage in het dashboard

Opmerkingen
- *Indien nodig kunt u deze lipjes ombuigen voor een steviger bevestiging (5-2).*
- *De 4 grepen op de beschermende rand ④ moeten goed in de sleuven van het toestel zijn geplaatst (6-3).*

Verwijderen en bevestigen van het afneembare voorpaneel (6)

Verwijder, alvorens met het installeren te beginnen, het afneembare voorpaneel.

6-A Verwijderen
Vergeet niet, voordat u het voorpaneel verwijdert, eerst op (OFF) te drukken. Druk vervolgens op de (OPEN) toets en trek het naar u toe.

6-B Bevestigen
Breng deel Ⓐ van het voorpaneel aan op deel Ⓑ van het apparaat zoals afgebeeld en druk op de linkerzijde tot deze vastklikt.

Opgelet bij het monteren in een auto waarvan het contactslot geen ACC (accessory) stand heeft

Als de motor is uitgeschakeld, moet u op (OFF) drukken en deze toets ingedrukt houden tot de weergave verdwijnt.
Als u dit niet doet, wordt de weergave niet uitgeschakeld en raakt de batterij uitgeput.

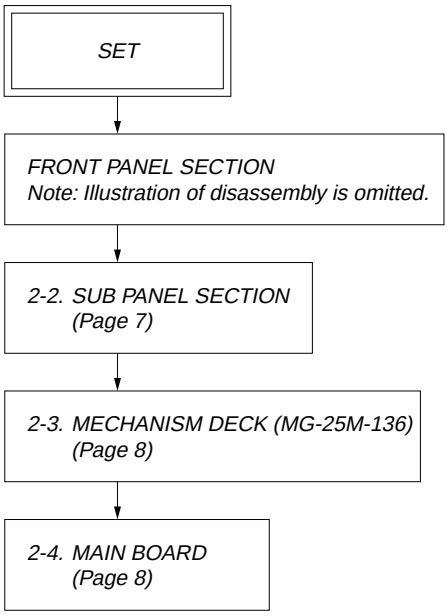
RESET-toets

Na het installeren en verrichten van alle aansluitingen, moet u altijd het voorpaneel verwijderen en de RESET-toets indrukken met een balpen of dergelijke.

SECTION 2
DISASSEMBLY

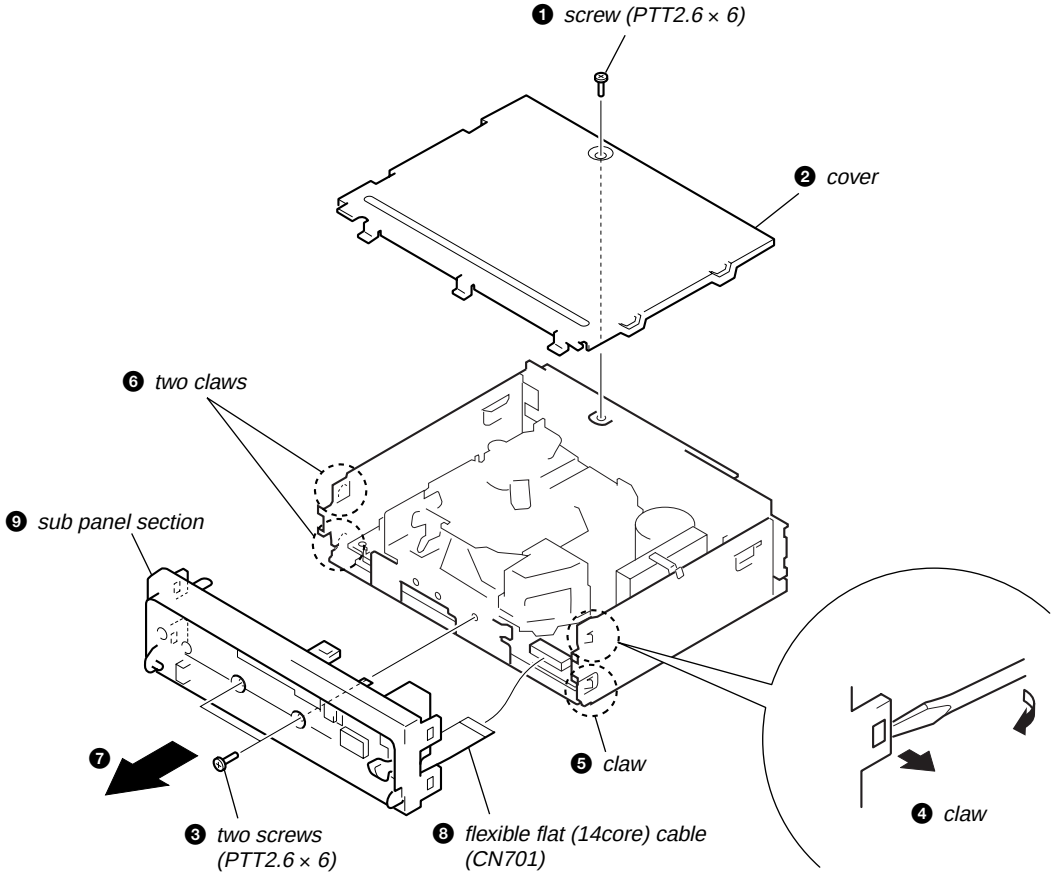
• This set can be disassembled in the order shown below.

2-1. DISASSEMBLY FLOW

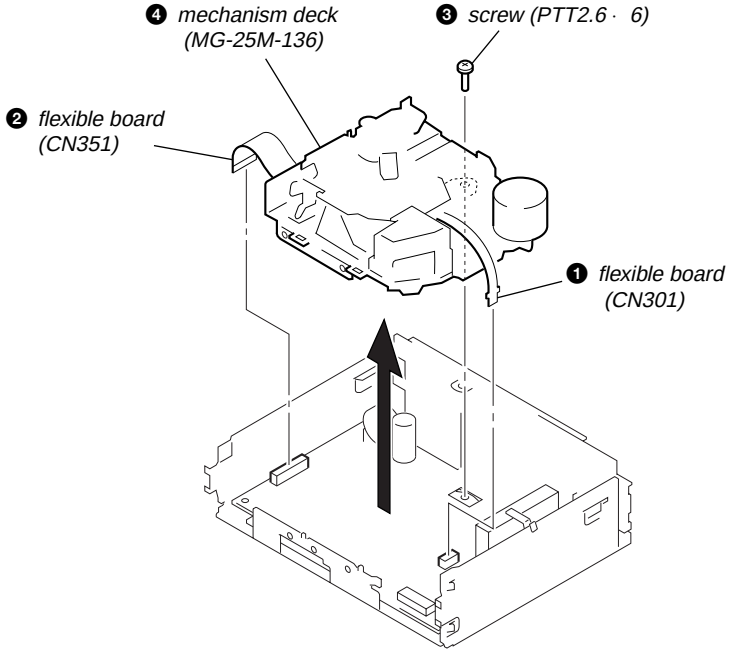


Note: Follow the disassembly procedure in the numerical order given.

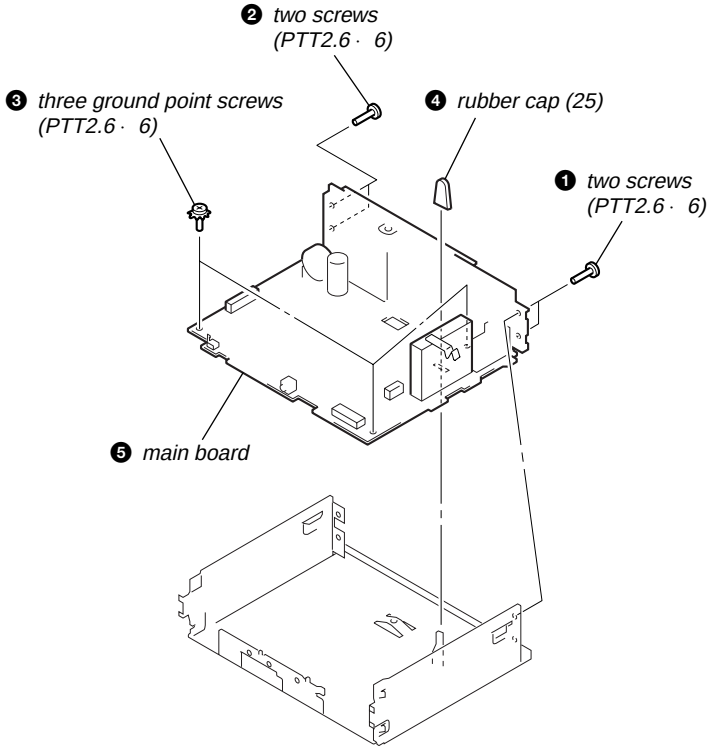
2-2. SUB PANEL SECTION



2-3. MECHANISM DECK (MG-25M-136)



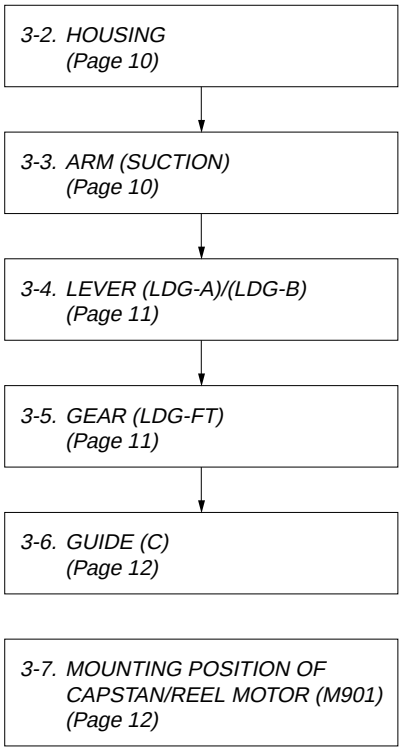
2-4. MAIN BOARD



SECTION 3
ASSEMBLY

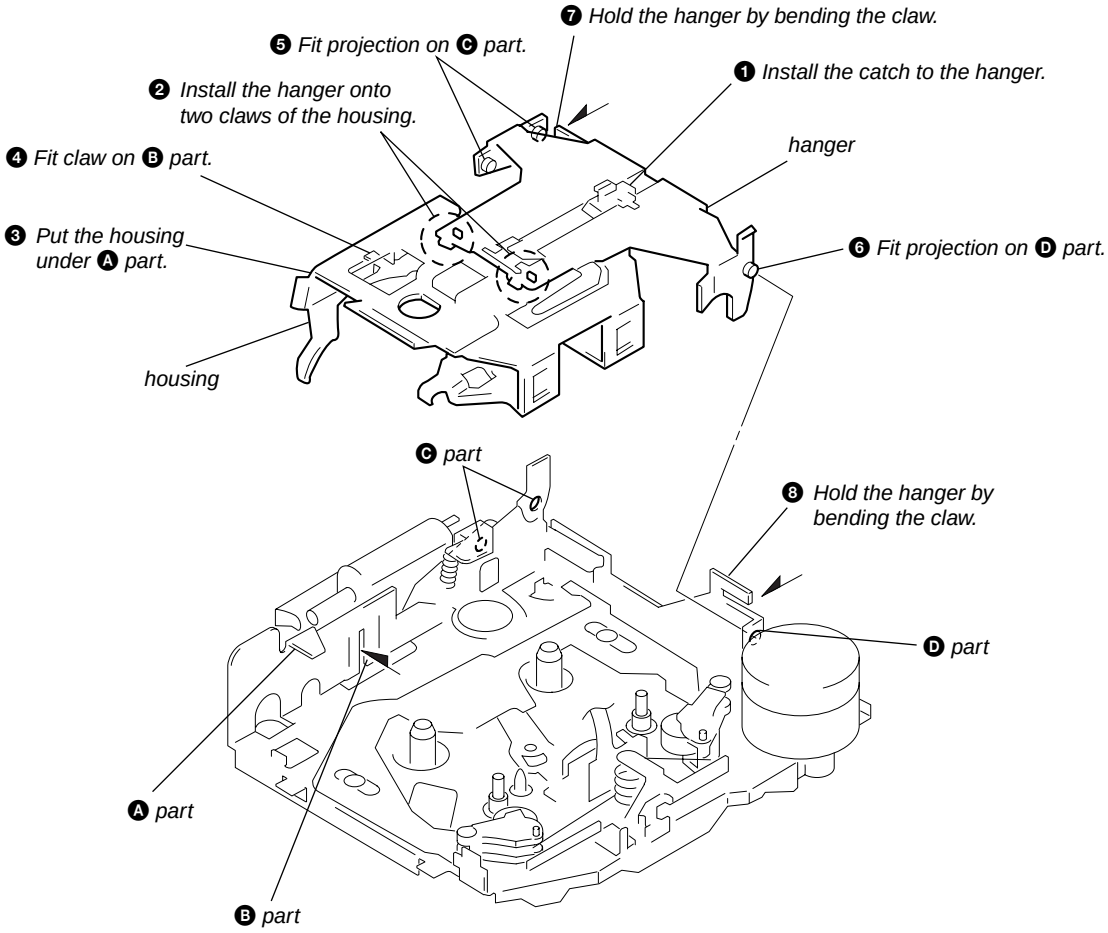
• This set can be assembled in the order shown below.

3-1. ASSEMBLY FLOW

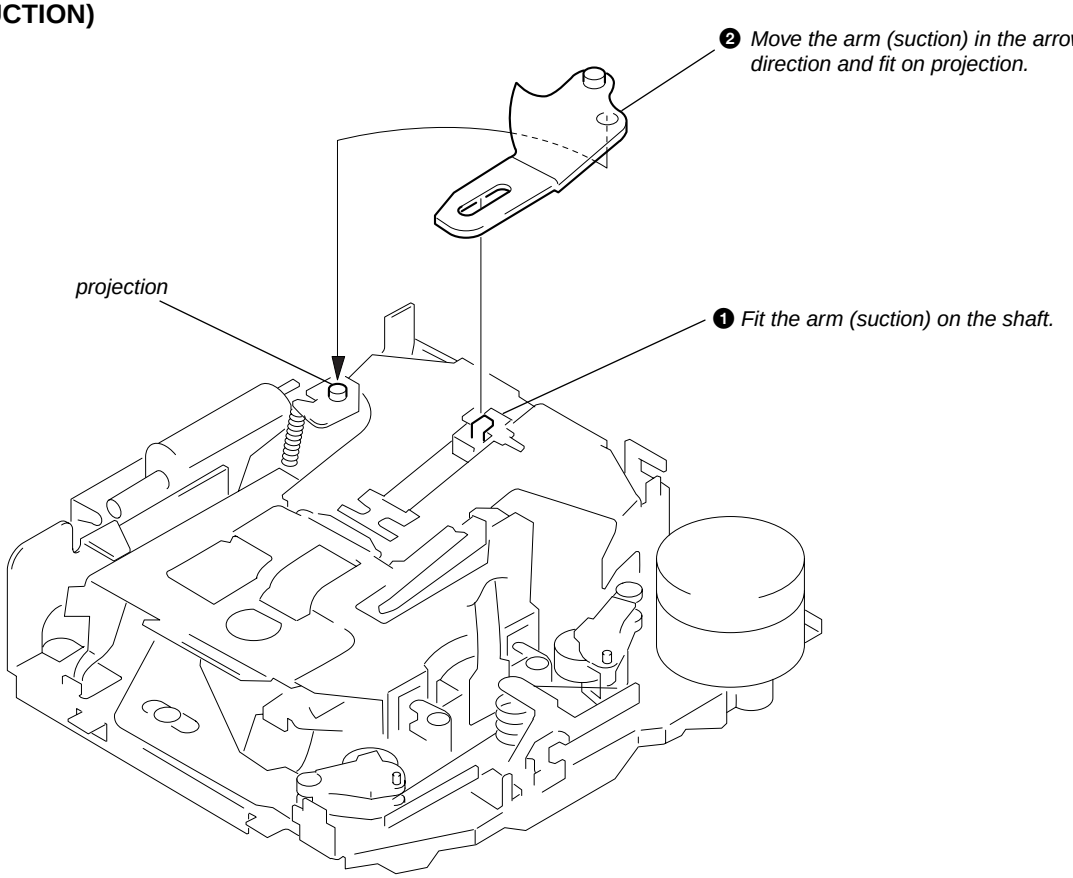


Note: Follow the assembly procedure in the numerical order given.

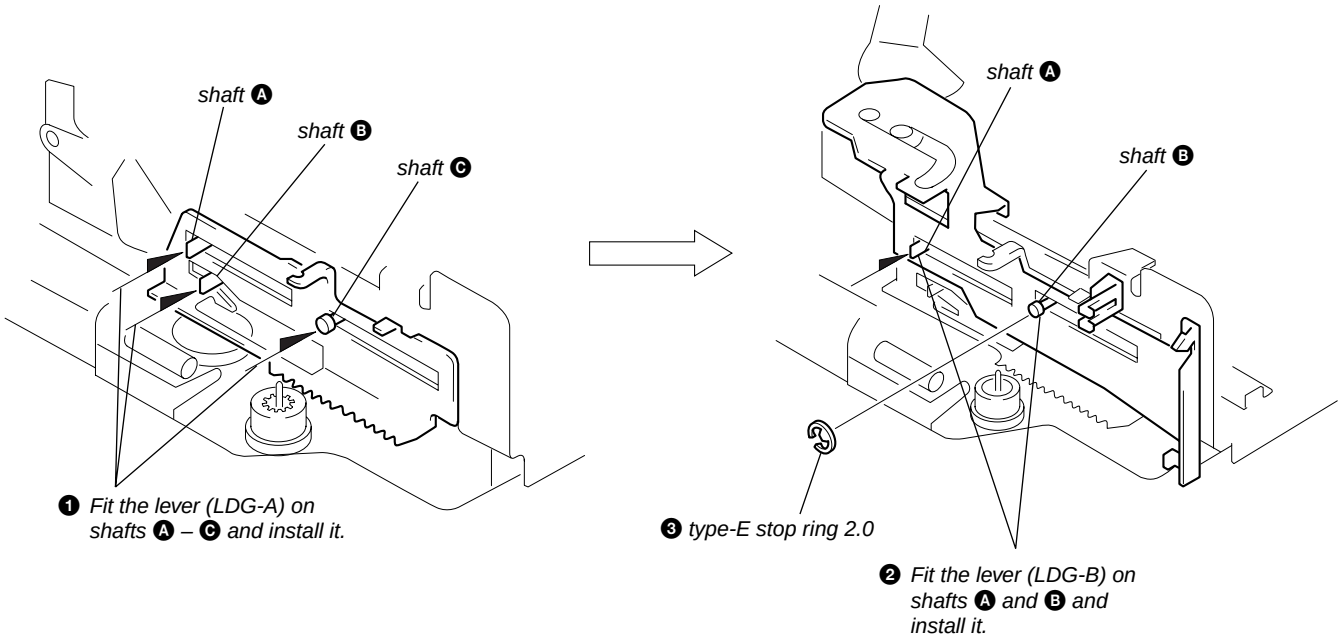
3-2. HOUSING


❼ Hold the hanger by bending the claw.
❺ Fit projection on Ⓒ part.
❶ Install the catch to the hanger.
❷ Install the hanger onto two claws of the housing.
hanger
❹ Fit claw on Ⓑ part.
❸ Put the housing under Ⓐ part.
❻ Fit projection on Ⓓ part.
housing
Ⓒ part
❽ Hold the hanger by bending the claw.
Ⓓ part
Ⓐ part
Ⓑ part

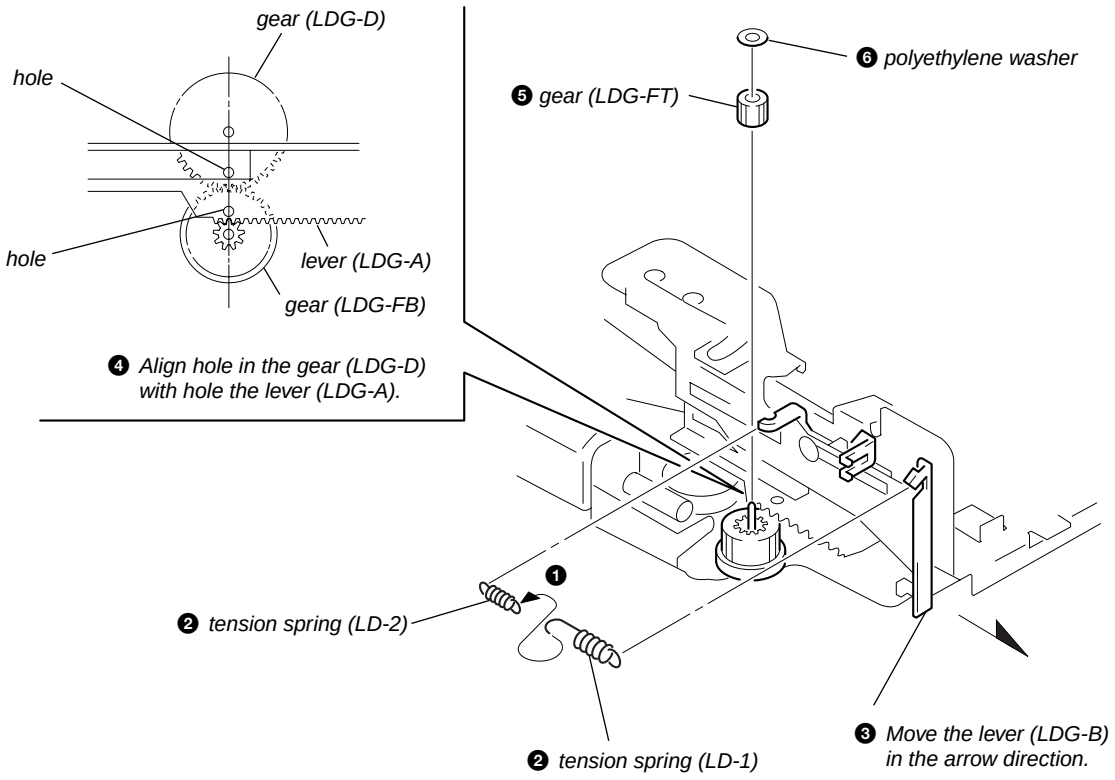
3-3. ARM (SUCTION)



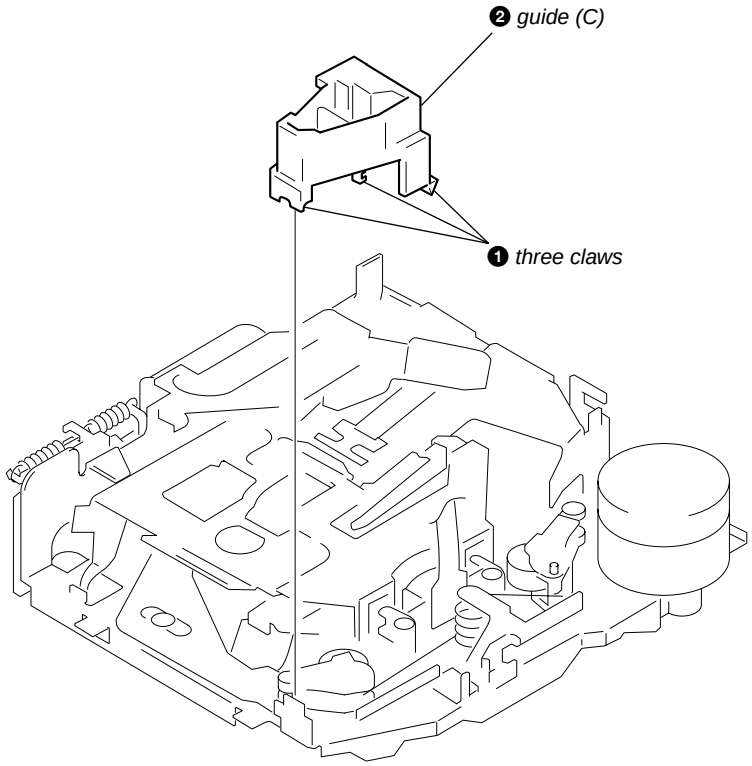
3-4. LEVER (LDG-A) / (LDG-B)


shaft Ⓐ
shaft Ⓑ
shaft Ⓒ
❶ Fit the lever (LDG-A) on shafts Ⓐ – Ⓒ and install it.
shaft Ⓐ
shaft Ⓑ
❸ type-E stop ring 2.0
❷ Fit the lever (LDG-B) on shafts Ⓐ and Ⓑ and install it.

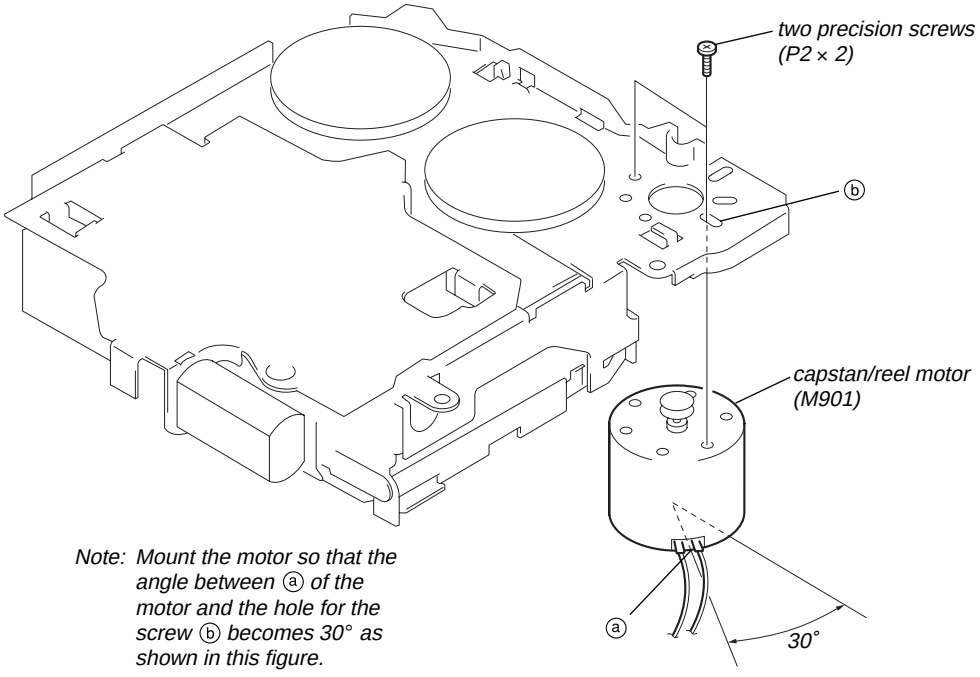
3-5. GEAR (LDG-FT)



3-6. GUIDE (C)



3-7. MOUNTING POSITION OF CAPSTAN/REEL MOTOR (M901)



Note: Mount the motor so that the angle between ⓐ of the motor and the hole for the screw ⓑ becomes 30° as shown in this figure.

SECTION 4
MECHANICAL ADJUSTMENTS

1. Clean the following parts with a denatured-alcohol-moistened swab:
   playback head pinch roller
   rubber belt capstan
   idler
2. Demagnetize the playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. The adjustments should be performed with the power supply voltage (14.4 V) unless otherwise noted.

TORQUE MEASUREMENT

Mode	Torque Meter	Meter Reading
Forward	CQ-102C	2.95 – 6.37 mN•m (30 – 65 g•cm) (0.42 – 0.90 oz•inch)
Forward Back Tension	CQ-102C	0.05 – 0.44 mN•m (0.5 – 4.5g•cm) (0.01 – 0.06 oz•inch)
Reverse	CQ-102RC	2.95 – 6.37 mN•m (30 – 65 g•cm) (0.42 – 0.90 oz•inch)
Reverse Back Tension	CQ-102RC	0.05 – 0.44 mN•m (0.5 – 4.5g•cm) (0.01 – 0.06 oz•inch)
FF, REW	CQ-201B	5.89 – 19.61 mN•m (60 – 200 g•cm) (0.83 – 2.78 oz•inch)

TAPE TENSION MEASUREMENT

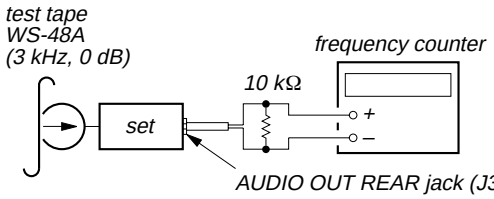
Mode	Tension Meter	Meter Reading
Forward	CQ-403A	more than 60 g (more than 2.12 oz)
Reverse	CQ-403R	more than 60 g (more than 2.12 oz)

SECTION 5
ELECTRICAL ADJUSTMENTS

TAPE DECK SECTION | 0 dB=0.775 V

TAPE SPEED ADJUSTMENT

Setting:



Procedure:

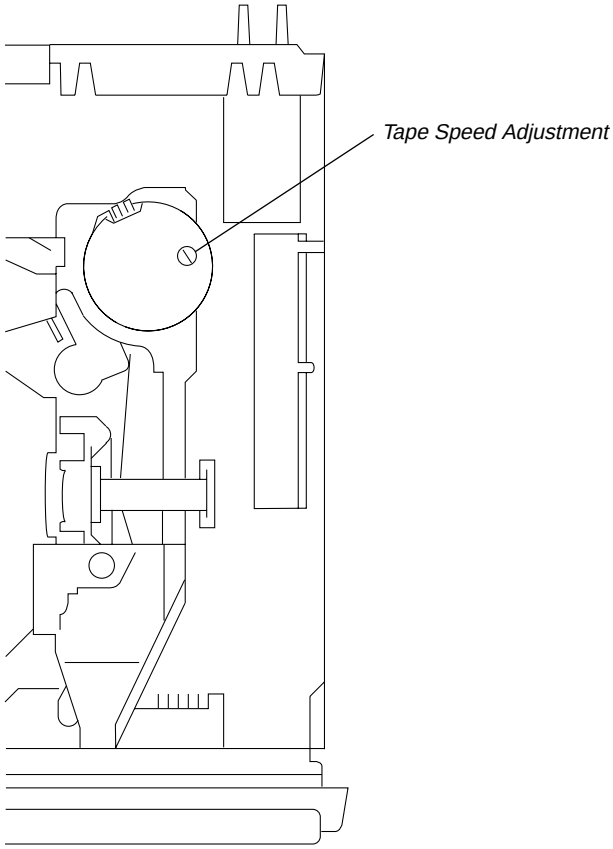
1. Put the set into the FWD PB mode.
2. Adjust adjustment resistor for inside capstan motor so that the reading on the frequency counter becomes 3,000 Hz.

Specification: Constant speed

Frequency counter
2,955 to 3,075 Hz

Adjustment Location:

– SET UPPER VIEW –



TUNER SECTION

Tuner section adjustments are done automatically in this set.

SECTION 6
DIAGRAMS

6-1. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Printed Wiring Board:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ▬ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.

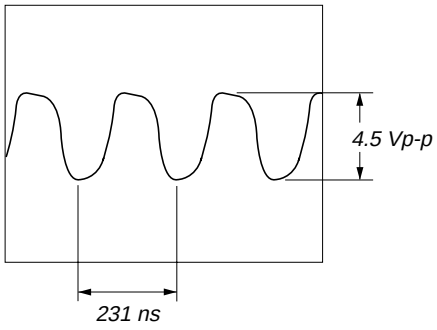
Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▭ : panel designation.
- ▬ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  [ ] : TAPE PLAYBACK
  * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ➡ : MW/LW
  ⇨ : TAPE PLAYBACK
  ⇨ : BUS AUDIO IN

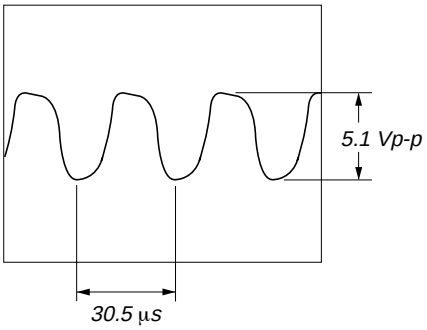
- **Waveforms**

– MAIN Board –

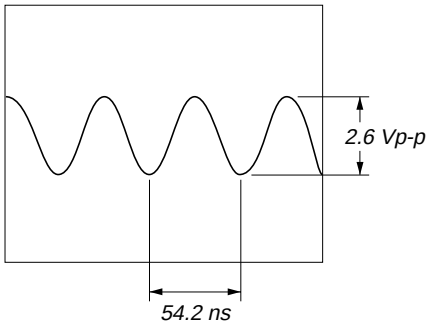
❶ IC51 ④ (OSCO)



❸ IC501 ⑯ (XO)

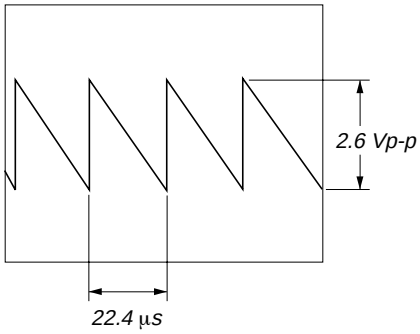


❷ IC501 ⑫ (OSC2)

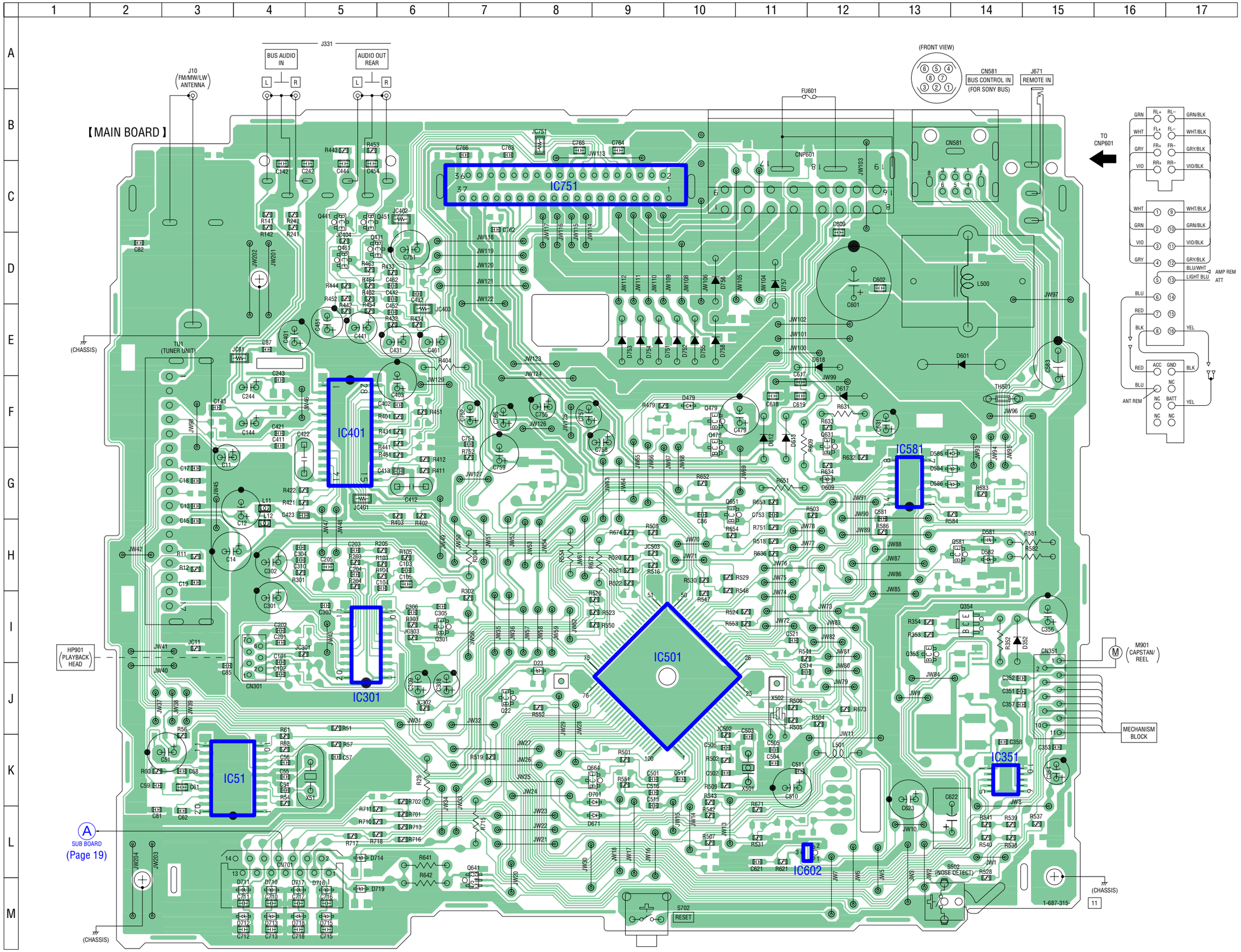


– KEY Board –

❹ IC901 ⑭ (OSC)



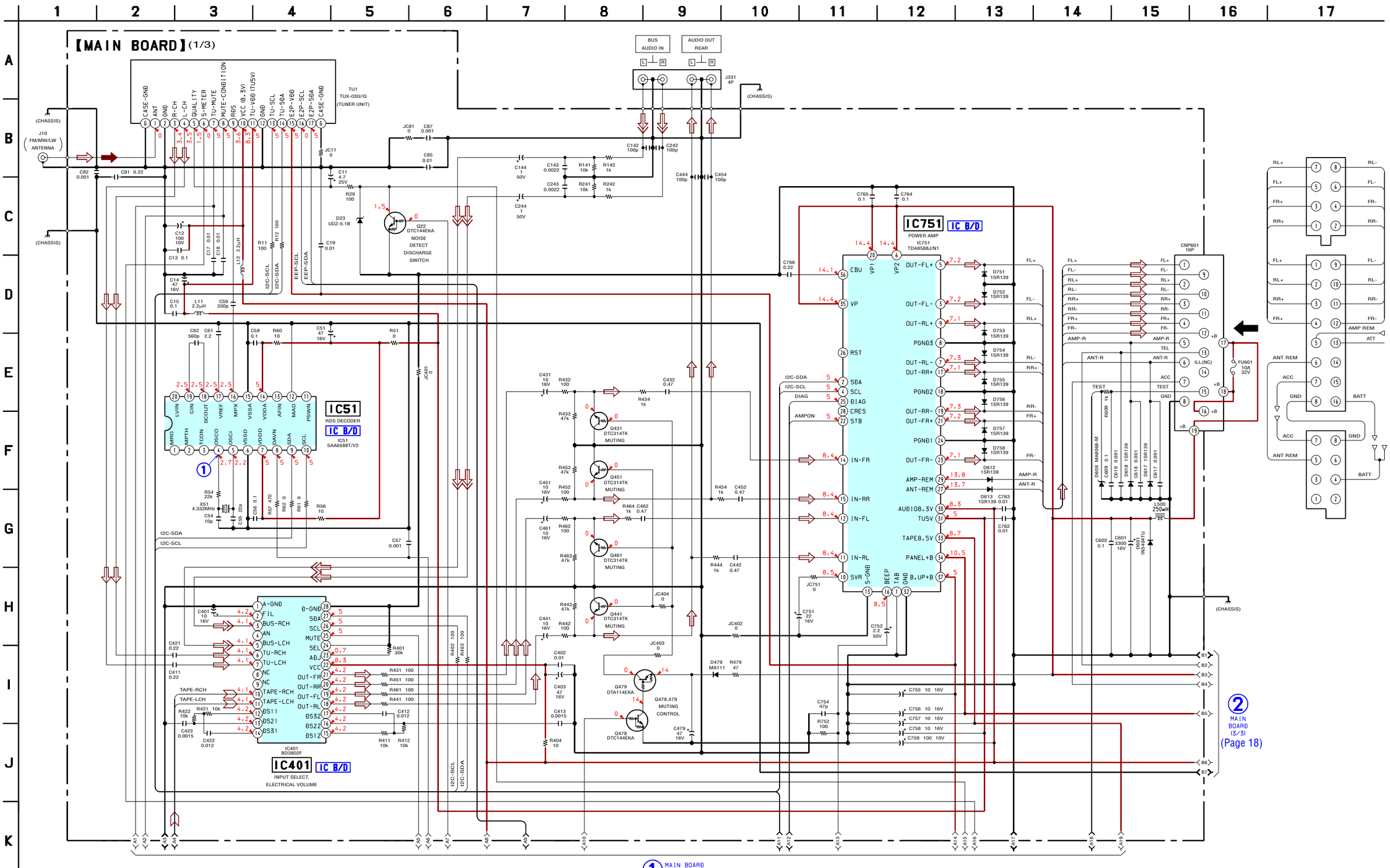
6-2. PRINTED WIRING BOARD – MAIN Board –



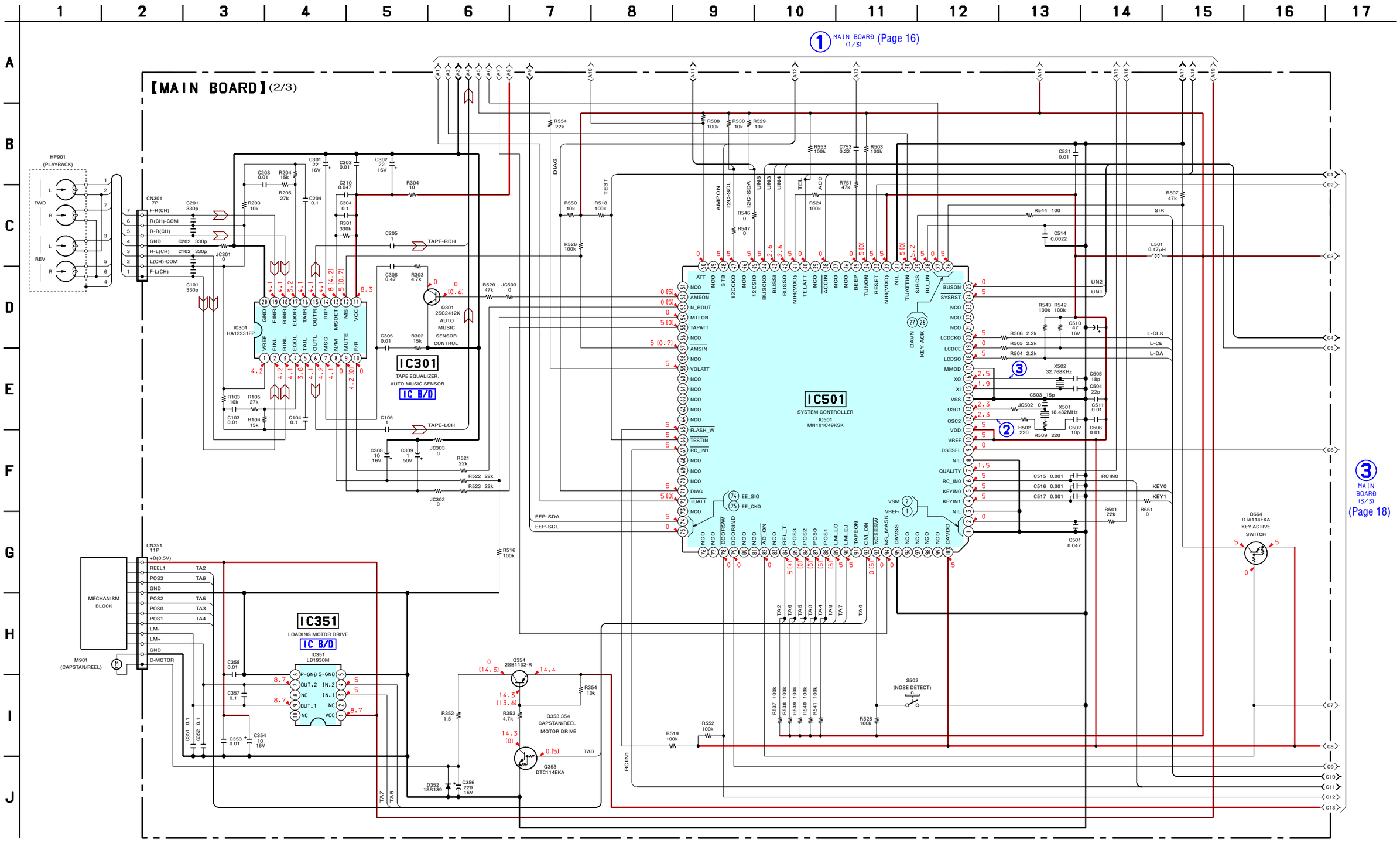
- **Semiconductor Location**

Ref. No.	Location
D23	J-8
D352	I-14
D479	F-10
D581	H-14
D582	H-14
D584	G-14
D585	G-14
D586	G-14
D601	E-14
D609	G-12
D612	F-11
D613	F-11
D617	F-12
D618	E-12
D671	L-9
D701	K-9
D710	M-4
D711	M-4
D712	M-4
D713	M-4
D714	L-5
D715	M-5
D716	M-5
D717	M-4
D718	M-4
D719	M-5
D751	E-9
D752	E-10
D753	E-9
D754	E-9
D755	E-10
D756	D-10
D757	D-11
D758	E-10
IC51	K-3
IC301	I-5
IC351	K-14
IC401	F-5
IC501	J-9
IC581	G-13
IC602	L-11
IC751	C-8
Q22	J-7
Q301	I-6
Q353	I-13
Q354	I-14
Q431	D-6
Q441	C-5
Q451	C-5
Q461	D-5
Q478	F-10
Q479	F-10
Q581	H-14
Q631	F-12
Q641	M-7
Q651	G-10
Q664	K-9

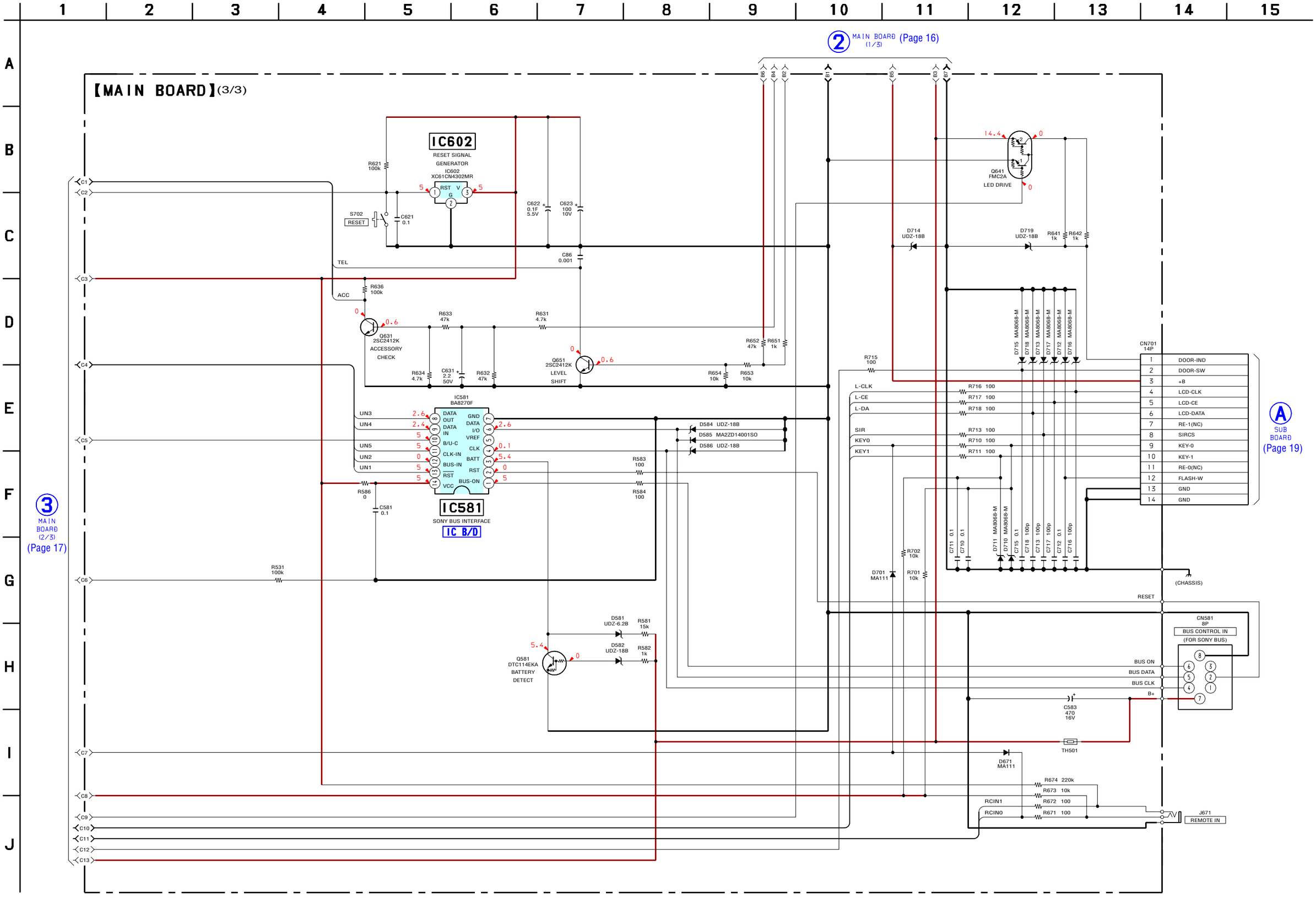
6-3. SCHEMATIC DIAGRAM – MAIN Board (1/3) – • See page 14 for Waveform. • See page 22 for IC Block Diagrams.



6-4. SCHEMATIC DIAGRAM – MAIN Board (2/3) – • See page 14 for Waveforms. • See page 22 for IC Block Diagrams.

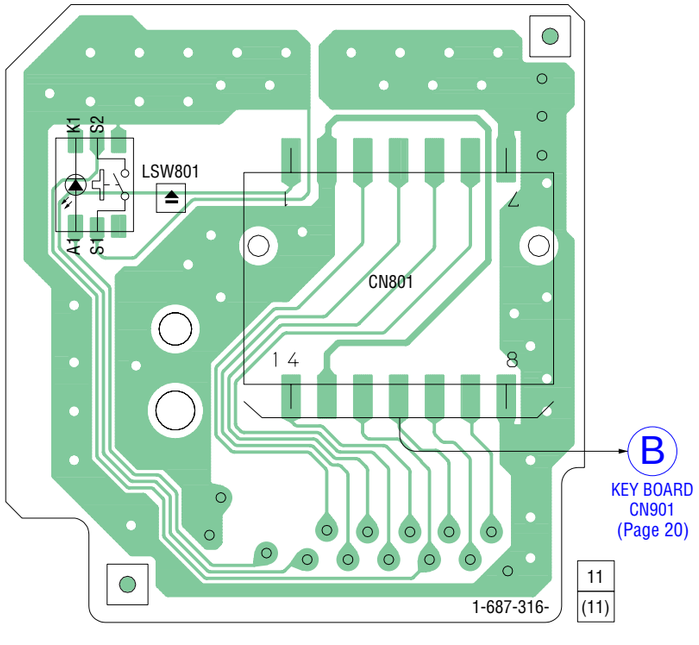


6-5. SCHEMATIC DIAGRAM – MAIN Board (3/3) – • See page 22 for IC Block Diagram.

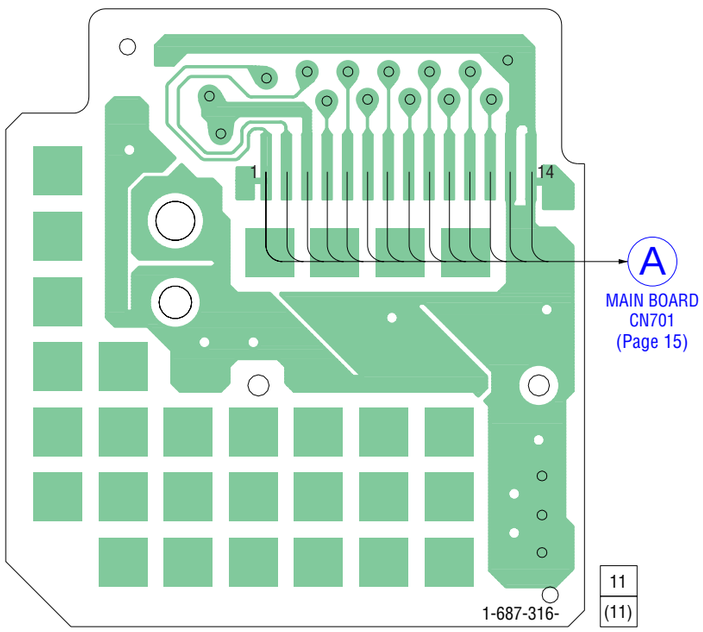


6-6. PRINTED WIRING BOARD – SUB Board –

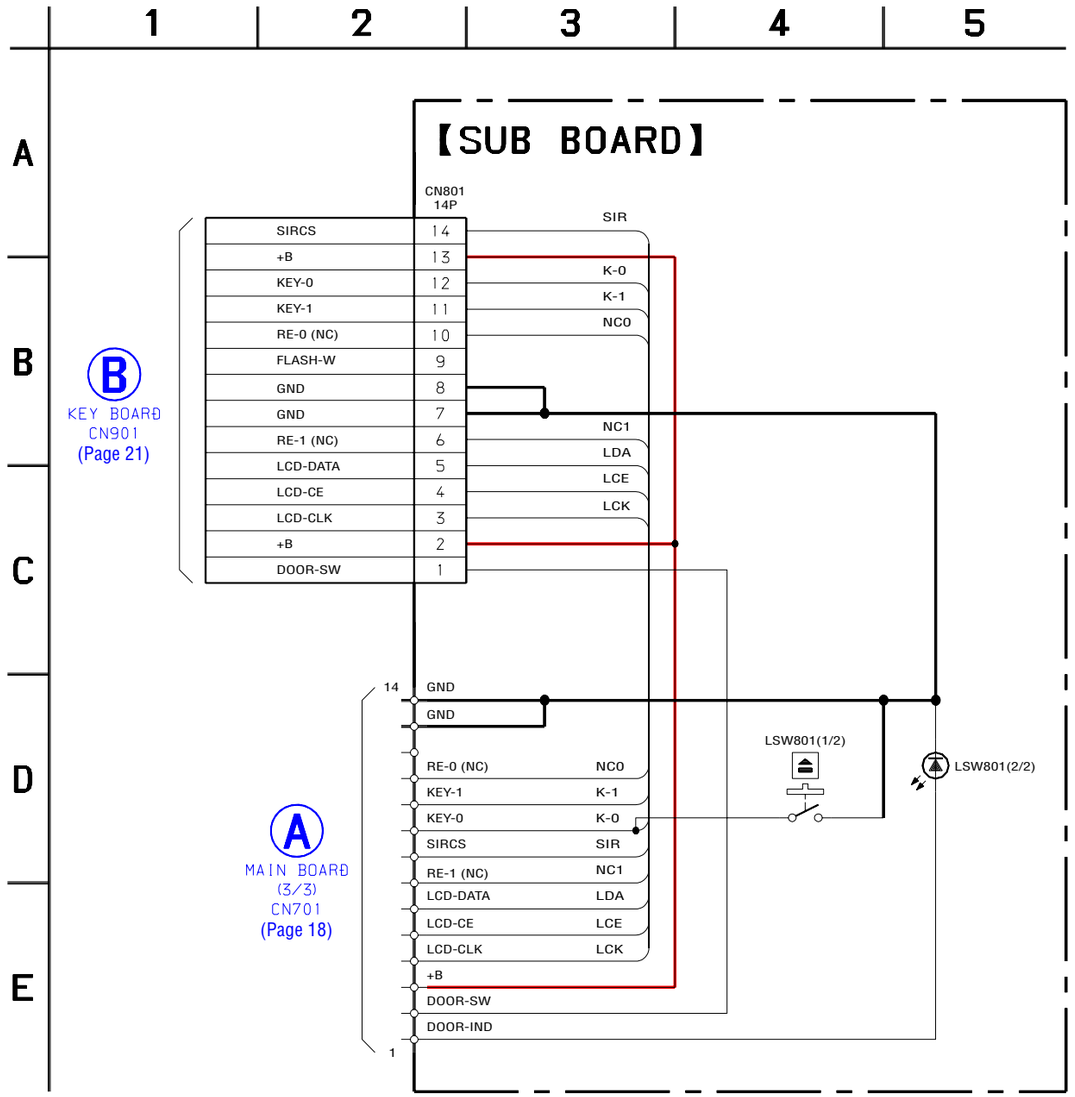
【SUB BOARD】(COMPONENT SIDE)



【SUB BOARD】(CONDUCTOR SIDE)

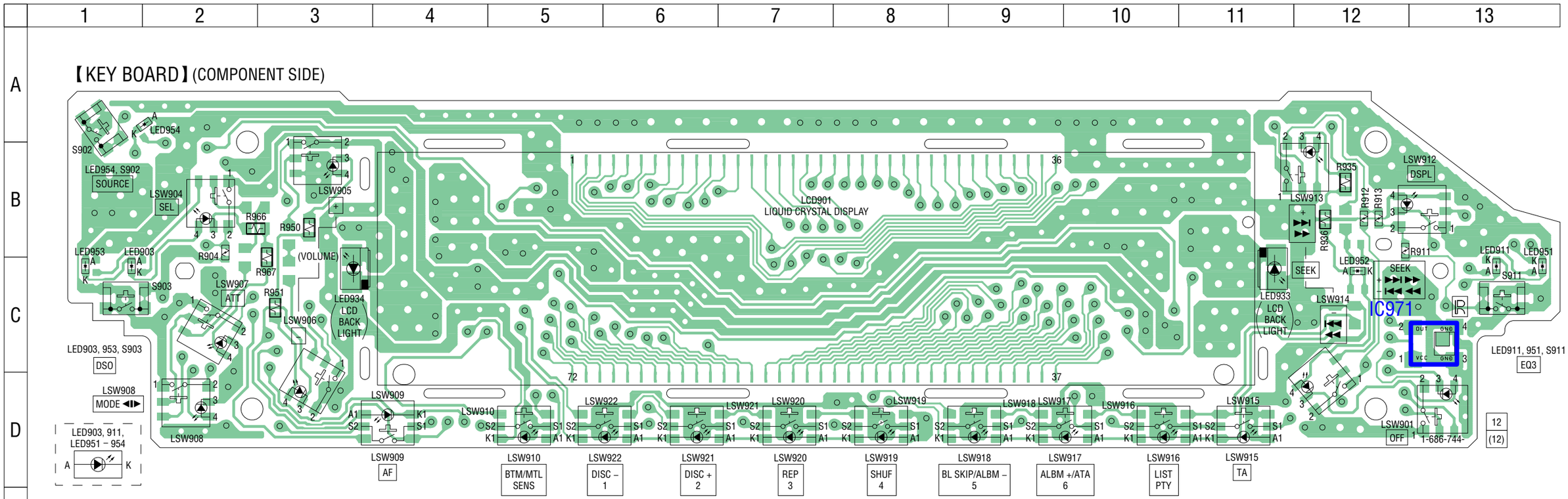


6-7. SCHEMATIC DIAGRAM – SUB Board –

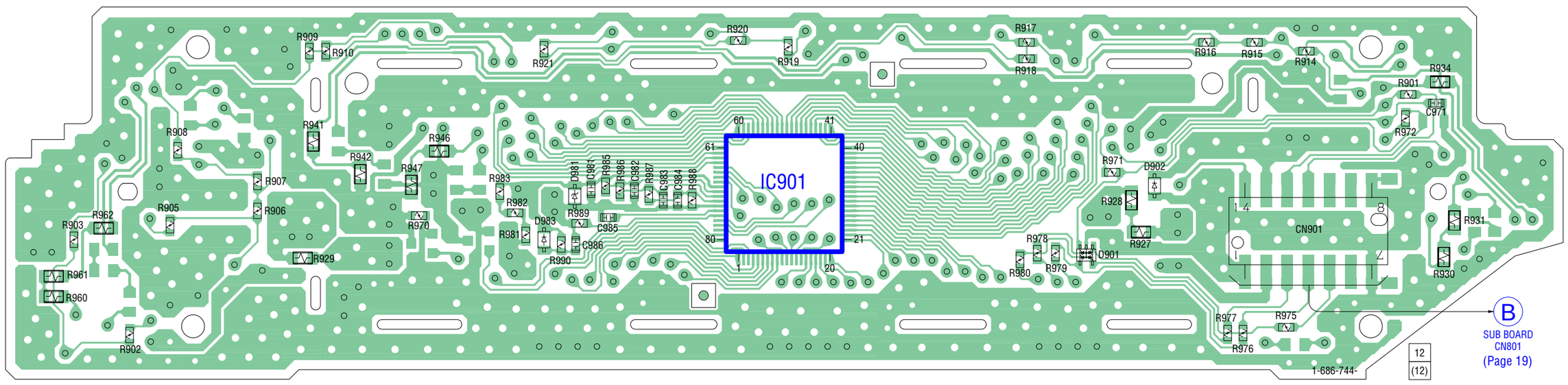


6-8. PRINTED WIRING BOARD – KEY Board –

【KEY BOARD】(COMPONENT SIDE)



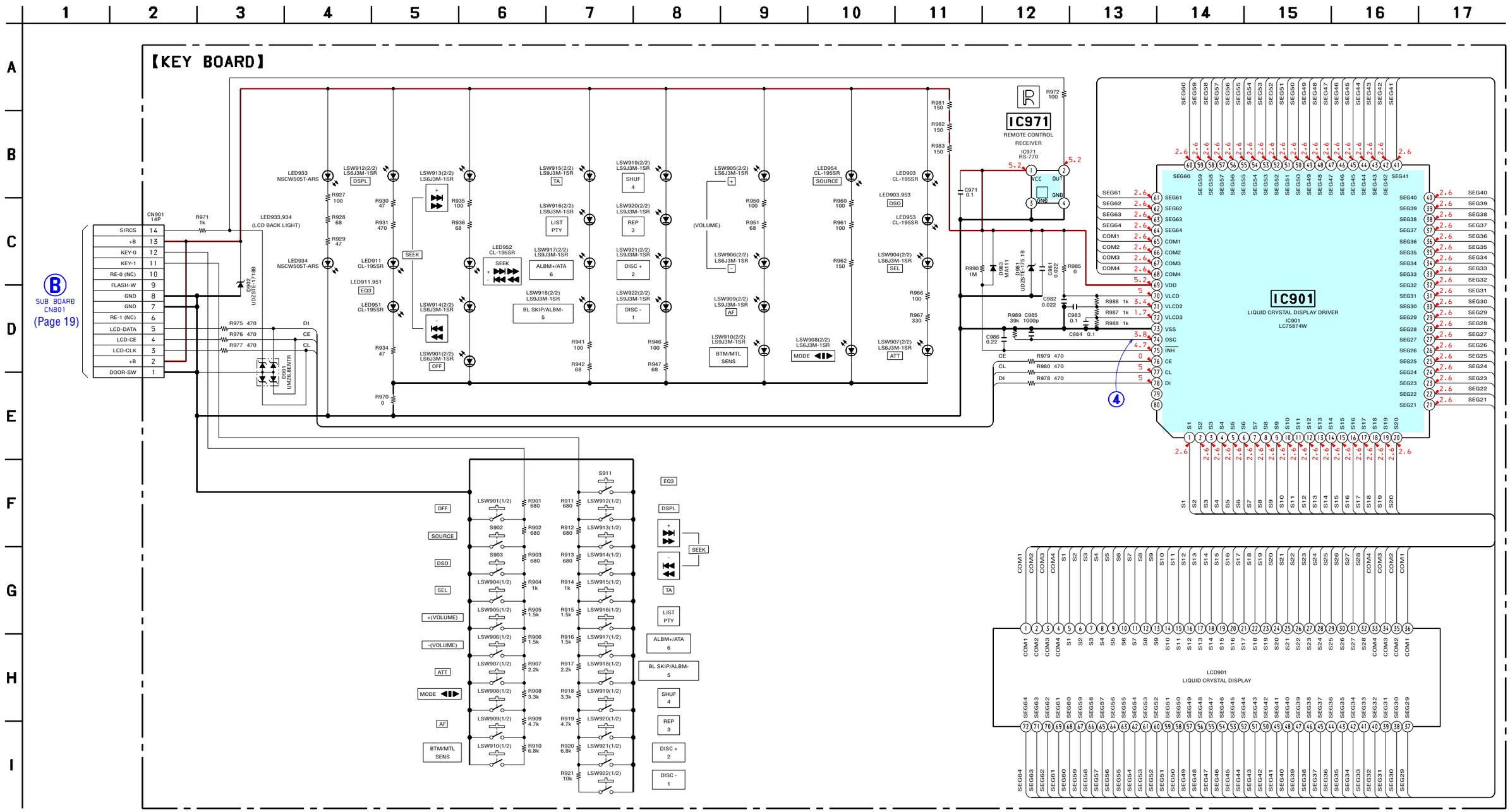
【KEY BOARD】(CONDUCTOR SIDE)



- **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D901	G-10	IC971	C-13	LED951	C-13
D902	G-10			LED952	C-12
D981	G-6	LED903	C-1	LED953	C-1
D983	G-5	LED911	C-13	LED954	A-2
		LED933	C-11		
IC901	G-7	LED934	C-3		

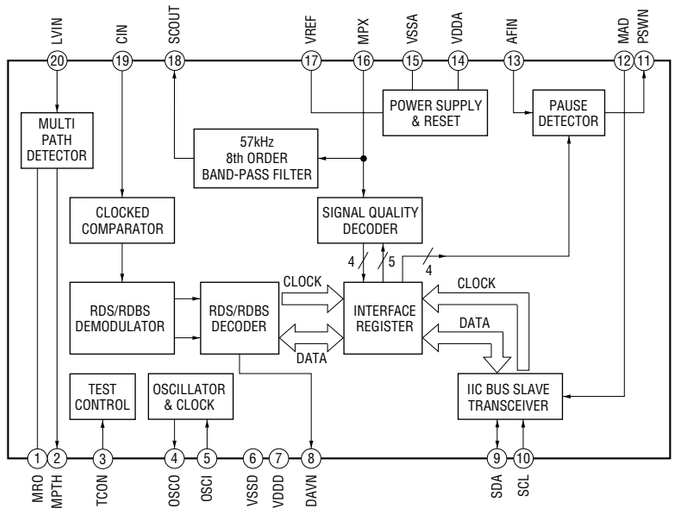
6-9. SCHEMATIC DIAGRAM – KEY Board – • See page 14 for Waveform.



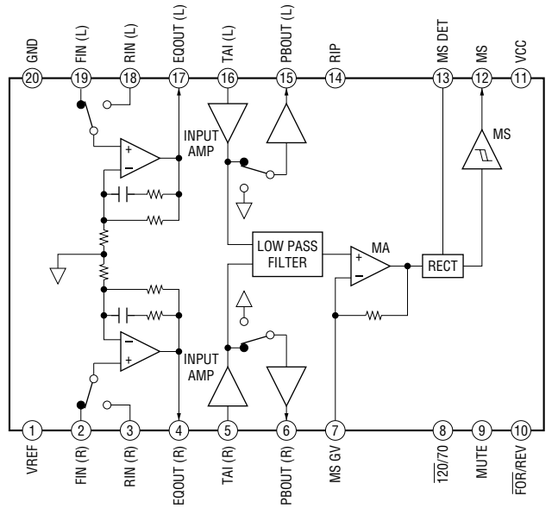
- **IC Block Diagrams**

– MAIN Board –

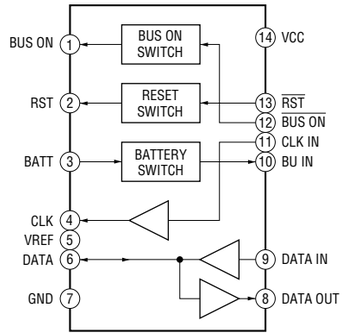
IC51 SAA6588T/V2-518



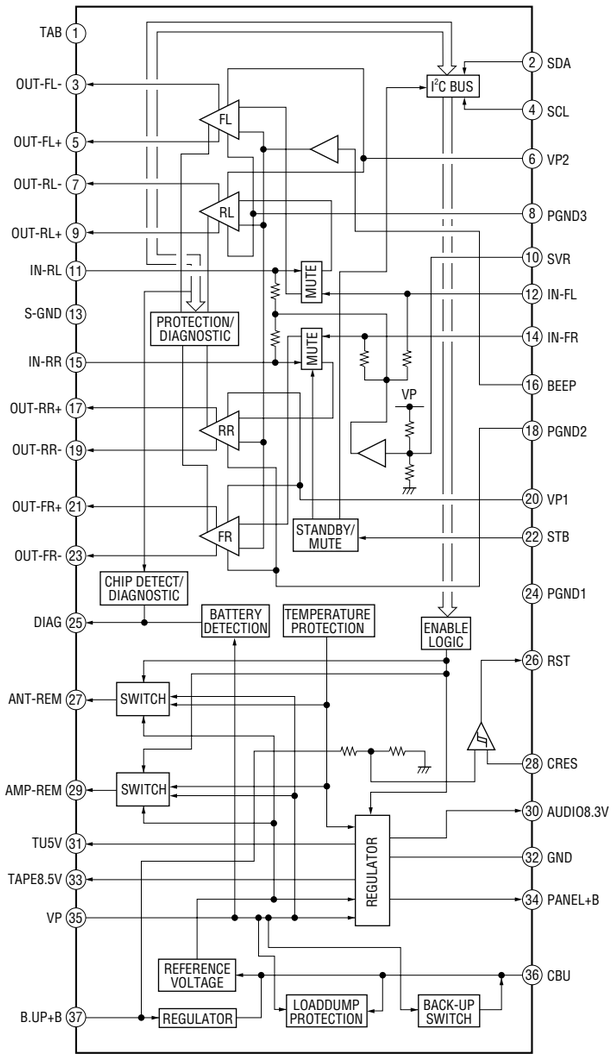
IC301 HA12231FP



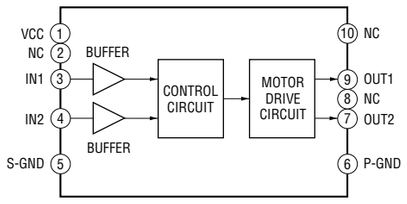
IC581 BA8270F-E2



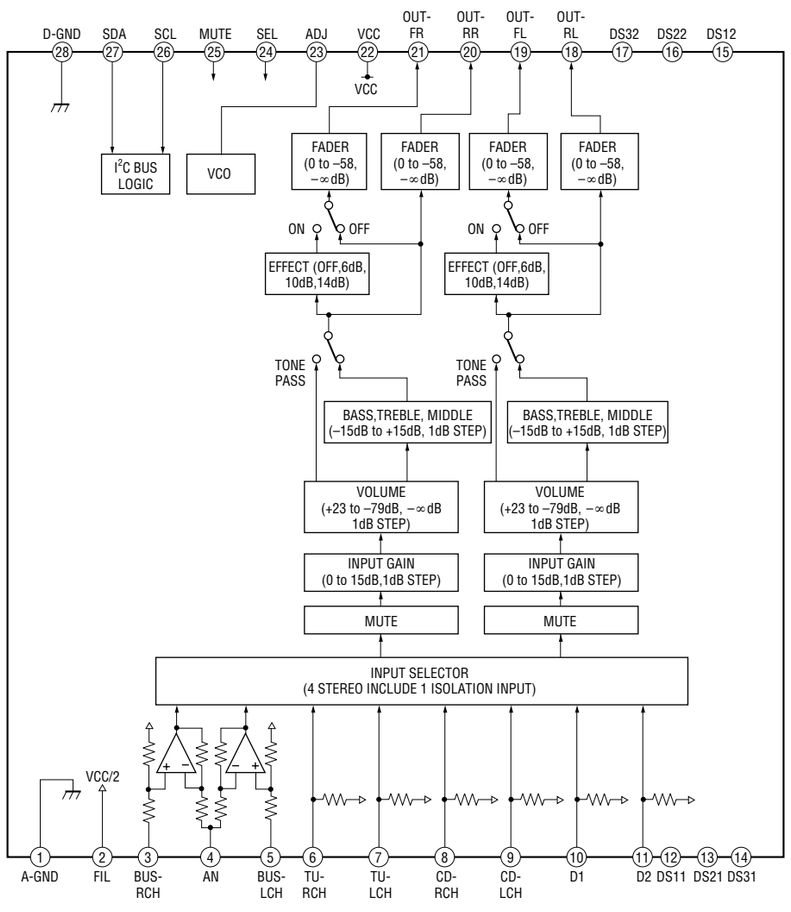
IC751 TDA8588J/N1/M5



IC351 LB1930M-TLM



IC401 BD3802F-FE2



6-10. IC PIN FUNCTION DESCRIPTION

• MAIN BOARD IC501 MN101C49KSK (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	VREF–	I	Reference voltage (0V) input terminal (for A/D converter)
2	VSM	I	FM and AM signal meter voltage detection signal input from the tuner unit (A/D input)
3	NIL	I	Not used
4	KEYIN1	I	Key input terminal (A/D input)
5	KEYIN0	I	Key input terminal (A/D input)
6	RC_IN0	I	Rotary remote commander key input terminal (A/D input)
7	QUALITY	I	Noise level detection signal input from the tuner unit (A/D input)
8	NIL	I	Not used
9	DSTSEL	I	Destination setting terminal
10	VREF+	I	Reference voltage (+5V) input terminal (for A/D converter)
11	VDD	—	Power supply terminal (+5V)
12	OSC2	O	Main system clock output terminal (18.432 MHz)
13	OSC1	I	Main system clock input terminal (18.432 MHz)
14	VSS	—	Ground terminal
15	XI	I	Sub system clock input terminal (32.768 kHz)
16	XO	O	Sub system clock output terminal (32.768 kHz)
17	MMOD	I	Selection signal of memory mode input terminal “L”: single chip mode (fixed at “L” in this set)
18	LCDSO	O	Serial data output to the liquid crystal display driver
19	LCDCE	O	Chip enable signal output to the liquid crystal display driver “H” active
20	LCDCKO	O	Serial data transfer clock signal output to the liquid crystal display driver
21 to 23	NCO	O	Not used
24	$\overline{\text{SYSRST}}$	O	System reset signal output to the SONY bus interface “L”: reset
25	$\overline{\text{BUSON}}$	O	Bus interface control signal output to the SONY bus interface “L”: bus on
26	KEYACK	I	Input of acknowledge signal for the key entry Acknowledge signal is input to accept function and eject keys in the power off status On at input of “H”
27	DAVN	I	Synchronized detection signal of RDS data block input from the RDS decoder “H” active
28	BU_IN	I	Battery detection signal input from the SONY bus interface “L” is input at low voltage
29	SIRCS	I	SIRCS remote control signal input from the remote control receiver
30	TUATT IN	I	Tuner muting on/off control signal input from the tuner unit “L”: muting on
31	NIL	I	Not used
32	VDD2	I	Power supply terminal (+5V)
33	RESET	I	System reset signal input from the reset signal generator and reset switch “L”: reset “L” is input for several 100 msec after power on, then it changes to “H”
34	TUNON	O	Tuner system power supply on/off control signal output “H”: tuner power on
35	BEEP	O	Beep sound drive signal output to the power amplifier
36, 37	NCO	O	Not used
38	$\overline{\text{ACCIN}}$	I	Accessory detection signal input “L”: accessory on
39	NCO	O	Not used
40	TELATT	I	Telephone attenuate signal input At input of “H”, the signal is attenuated by –20 dB Not used
41	NIH	I	Not used
42	BUSSO	O	Serial data output to the SONY bus interface
43	BUSSI	I	Serial data input from the SONY bus interface
44	BUSCKO	O	Serial data transfer clock signal output to the SONY bus interface

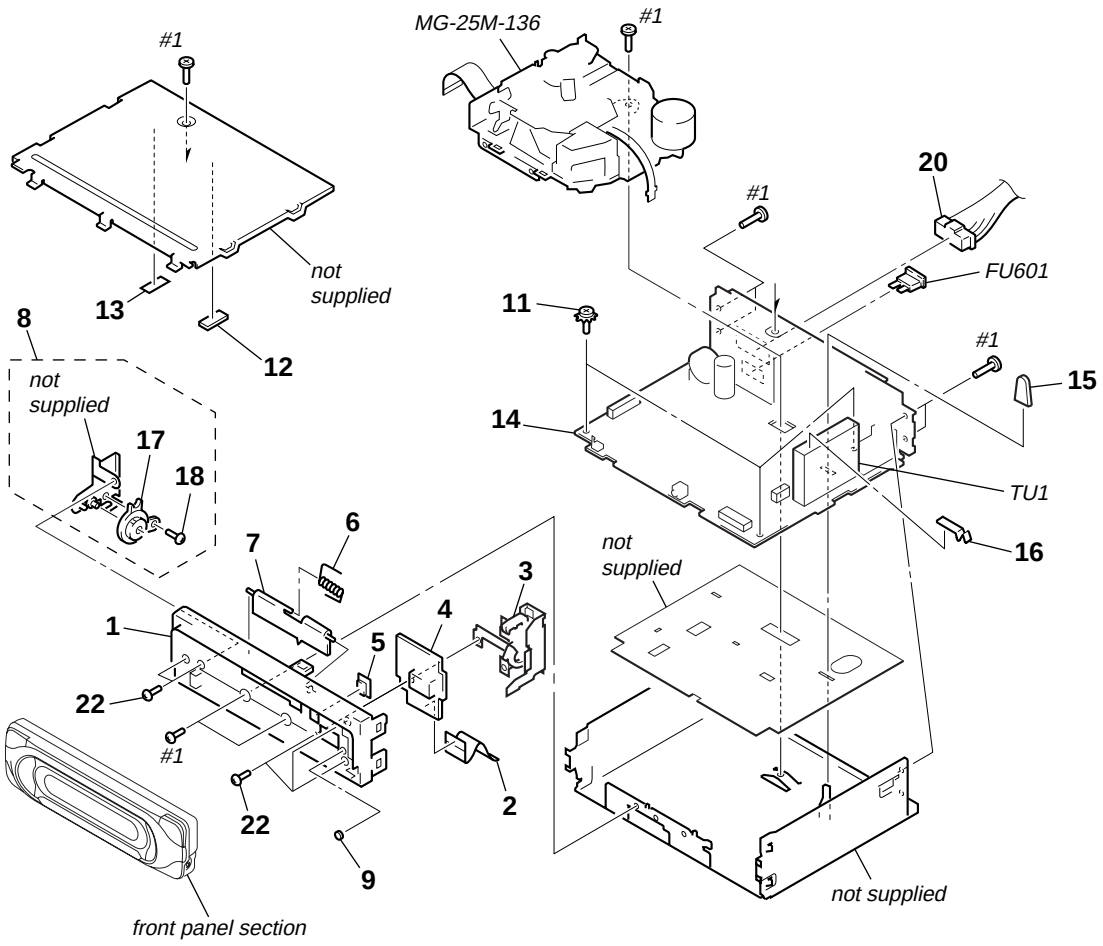
Pin No.	Pin Name	I/O	Description
45	I2CSIO	I/O	Two-way data bus with the tuner unit and electrical volume
46	NCO	O	Not used
47	I2CCKO	O	Serial data transfer clock signal output to the tuner unit and electrical volume
48	STB	O	Standby on/off control signal output to the power amplifier "L": standby mode, "H": amplifier on
49	NCO	O	Not used
50	ATT	O	Audio line muting on/off control signal output "H": muting on
51	NCO	O	Not used
52	$\overline{\text{AMSON}}$	O	Tape auto music sensor control signal output "L": auto music sensor on
53	N_ROUT	O	Forward/reverse control signal output "L": reverse direction, "H": forward direction
54	MTLON	I/O	METAL control in/out terminal At initial mode: valid/invalid selection input of METAL function (valid at "L" input) At normal mode: METAL on/off control signal output (METAL on at "H" output)
55	TAPATT	O	Tape muting on/off control signal output "H": muting on Active at ATA, FF/REW mode
56	NCO	O	Not used
57	$\overline{\text{AMSIN}}$	I	Whether a music is present or not is detected at auto music sensor "L": music is present, "H": music is not present
58	NCO	O	Not used
59	$\overline{\text{VOLATT}}$	O	Pre amplifier muting on/off control signal output to the electrical volume "L": muting on
60 to 64	NCO	O	Not used
65	$\overline{\text{FLASH\_W}}$	I	Internal flash memory data write mode detection signal input terminal "L": data write mode Not used
66	$\overline{\text{TESTIN}}$	I	Setting terminal for the test mode "L": test mode, normally fixed at "H"
67	$\overline{\text{RC\_IN1}}$	I	Rotary remote commander shift key input terminal "L": shift key on
68 to 70	NCO	O	Not used
71	DIAG	I	State input from power amplifier
72	$\overline{\text{TUATT}}$	O	Tuner muting on/off control signal output to the tuner unit "L": muting on
73	NCO	O	Not used
74	EE_SIO	I/O	Two-way data bus for tuner EEPROM with the tuner unit
75	EE_CKO	O	Two-way bus clock signal for tuner EEPROM with the tuner unit
76, 77	NCO	O	Not used
78	$\overline{\text{DOORSW}}$	I	Front panel open/close detection signal input "L" is input when the front panel is closed
79	DOORIND	O	LED drive signal output of the cassete tape slot illumination and ⏏ indicator "H": LED on "H" is output to turn on the LED when front panel is opened
80, 81	NCO	O	Not used
82	$\overline{\text{AD ON}}$	O	A/D converter power control signal output When the KEYACK (pin ㉖) that controls reference voltage power for key A/D conversion input is active, "L" is output from this terminal to enable the input
83	NCO	O	Not used
84	REL_T	I	Rotation detection signal input from supply reel sensor and take-up reel sensor on the mechanism deck
85	POS3	I	Tape position (EJECT/FF/REW/REV/ FWD mode) detect input from the tape operation switch on the deck mechanism POS3: "L": REV and EJECT mode, "H": others mode POS2: "L": REW mode, "H": others mode POS0: "L": EJECT mode, "H": others mode POS1: "L": PLAY and FF in FWD mode, and REW in REV mode, "H": others mode
86	POS2	I	
87	POS0	I	
88	POS1	I	

Pin No.	Pin Name	I/O	Description
89	LM_LO	O	Motor drive signal output to the loading motor drive "H" active (For the loading direction and forward side operation)
90	LM_EJ	O	Motor drive signal output to the loading motor drive "H" active (For the eject direction and reverse side operation)
91	TAPEON	O	Power on/off control signal output of the loading motor drive and capstan/reel motor "H": motor on Not used
92	CM_ON	O	Capstan/reel motor drive signal output "H": motor on
93	$\overline{\text{NOSESW}}$	I	Front panel block remove/attach detection signal input from the nose detection switch "L": front panel is attached, "H": front panel is removed
94	NS_MASK	O	Discharge control signal output for the noise detection circuit "H": discharge
95	DAVSS	—	Ground terminal (for D/A converter)
96 to 99	NCO	O	Not used
100	DAVDD	—	Power supply terminal (+5V) (for D/A converter)

SECTION 7
EXPLODED VIEWS

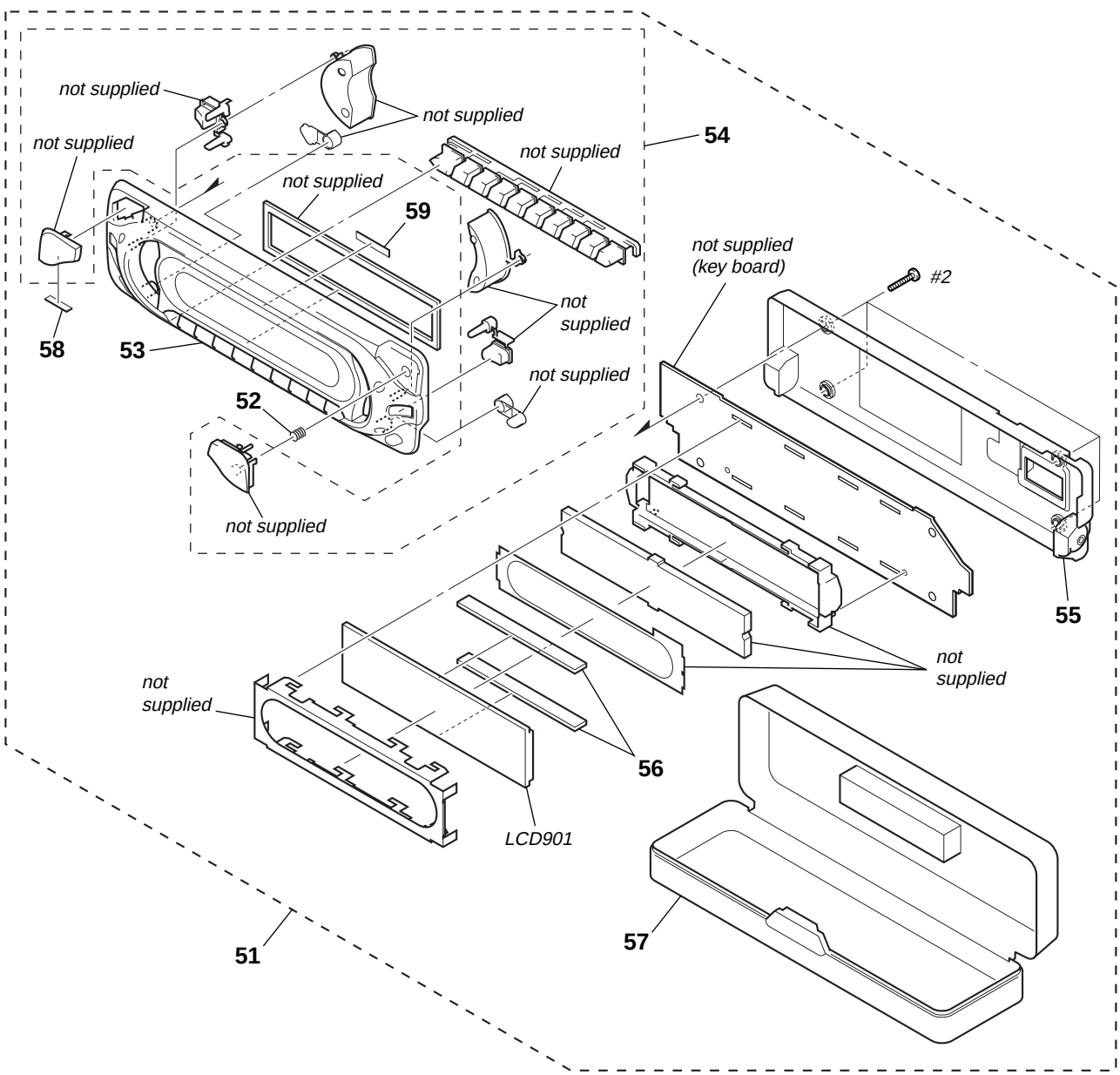
NOTE:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories are given in the last of the electrical parts list.

7-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
1	X-3382-790-1	PANEL ASSY, SUB	
2	1-792-195-11	CABLE, FLEXIBLE FLAT (14CORE)	
3	X-3381-381-3	LOCK ASSY	
4	1-687-316-11	SUB BOARD	
5	3-040-990-01	BUTTON (EJECT) (⏏)	
6	3-935-003-01	SPRING, TORSION	
7	3-027-437-12	DOOR, CASSETTE	
8	X-3376-699-6	GEAR ASSY	
9	3-243-177-01	CUSHION (SUB PANEL)	
11	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT	
* 12	3-046-991-02	SPACER (COVER R)	
* 13	3-046-990-01	SPACER (COVER L)	
14	A-3274-652-A	MAIN BOARD, COMPLETE	
15	3-012-859-21	CAP (25), RUBBER	
16	3-246-481-01	PLATE (TU), GROUND	
17	3-030-909-03	DAMPER, OIL	
18	3-713-786-51	SCREW (M2X3)	
20	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER)	
22	3-042-244-01	SCREW (T)	
FU601	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A/32V)	
TU1	A-3220-887-A	TUNER UNIT (TUX-030//Q)	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	

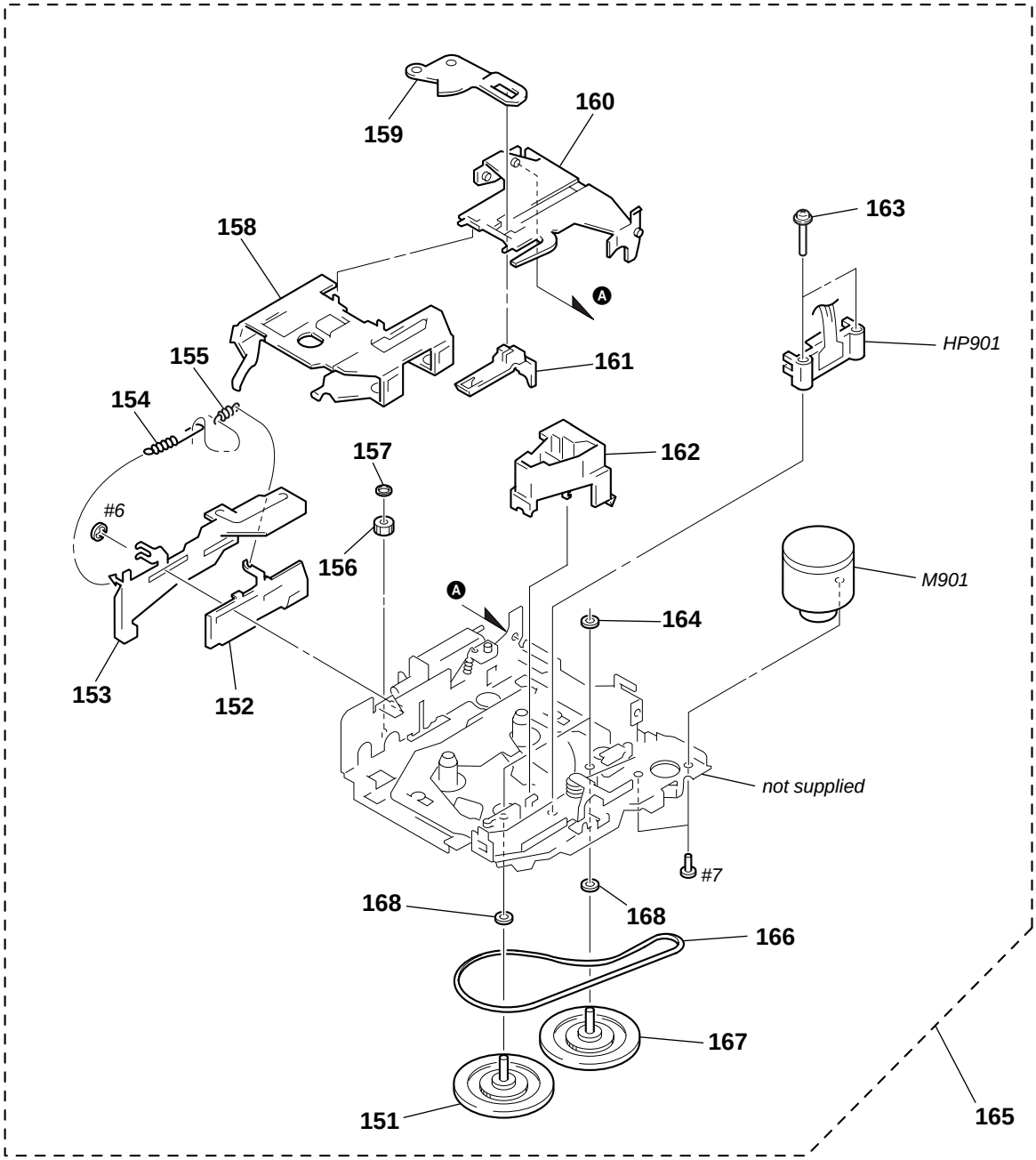
7-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	A-3337-205-A	PANEL COMPLETE ASSY, FRONT	
52	3-246-778-01	SPRING (OPEN)	
53	X-3382-881-1	PANEL (SV) ASSY, FRONT	
54	X-3383-105-4	BUTTON ASSY (S)	
55	X-3382-702-3	PANEL ASSY, FRONT BACK	
56	1-694-976-11	CONDUCTIVE BOARD, CONNECTION	

Ref. No.	Part No.	Description	Remark
57	X-3383-264-1	CASE ASSY	
58	3-253-597-01	SHEET (S)	
59	3-252-202-01	SHEET (ESD)	
LCD901	1-805-076-11	DISPLAY PANEL, LIQUID CRYSTAL	
#2	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT	

7-3. MECHANISM DECK SECTION (MG-25M-136)



Ref. No.	Part No.	Description	Remark
151	A-3291-667-A	CLUTCH (FR) ASSY	
* 152	3-019-130-01	LEVER (LDG-A)	
* 153	3-019-131-05	LEVER (LDG-B)	
154	3-228-690-01	SPRING (LD-1), TENSION	
155	3-020-540-01	SPRING (LD-2), TENSION	
156	3-020-542-01	GEAR (LOADING FT)	
157	3-341-753-11	WASHER, POLYETHYLENE	
158	3-020-533-01	HOUSING	
* 159	3-020-532-02	ARM (SUCTION)	
160	3-020-534-01	HANGER	
161	3-933-346-01	CATCHER	
162	3-933-344-22	GUIDE (C)	
163	3-927-100-21	SCREW (+PS 2X10), SPECIAL	
164	3-364-151-01	WASHER	
165	A-3220-832-A	MECHANISM DECK ASSY	
166	3-017-302-01	BELT (25)	
167	3-026-636-01	FLYWHEEL (F)	
168	3-701-437-21	WASHER	
HP901	1-500-196-31	HEAD, MAGNETIC (PLAYBACK)	
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)	
#6	7-624-104-04	STOP RING 2.0, TYPE-E	
#7	7-627-553-17	PRECISION SCREW +2X2 TYPE 3	

SECTION 8
ELECTRICAL PARTS LIST

KEY

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA. . : μA. . uPA. . : μPA. .
  uPB. . : μPB. . uPC. . : μPC. .
  uPD. . : μPD. .
- CAPACITORS
  uF: μF
- COILS
  uH: μH

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
		KEY BOARD			
		**********			
	1-694-976-11	CONDUCTIVE BOARD, CONNECTION			
		< CAPACITOR >			
C971	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C981	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C982	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C983	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C984	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C985	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C986	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
		< CONNECTOR >			
CN901	1-817-158-21	PLUG, CONNECTOR 14P			
		< DIODE >			
D901	8-719-085-72	DIODE UMZ6.8ENTR			
D902	8-719-083-66	DIODE UDZSTE-1718B			
D981	8-719-069-54	DIODE UDZSTE-175.1B			
D983	8-719-404-50	DIODE MA111-TX			
		< IC >			
IC901	8-759-826-21	IC LC75874W			
IC971	6-600-163-01	IC RS-770			
		< LIQUID CRYSTAL DISPLAY >			
LCD901	1-805-076-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< LED >			
LED903	6-500-450-01	LED CL-195SR-CD-T (DSO)			
LED911	6-500-450-01	LED CL-195SR-CD-T (EQ3)			
LED933	6-500-459-01	LED NSCW505T-ARS (LCD BACK LIGHT)			
LED934	6-500-459-01	LED NSCW505T-ARS (LCD BACK LIGHT)			
LED951	6-500-450-01	LED CL-195SR-CD-T (EQ3)			
LED952	6-500-450-01	LED CL-195SR-CD-T (SEEK + ▶▶I ▶▶ – I◀◀ ◀◀)			
LED953	6-500-450-01	LED CL-195SR-CD-T (DSO)			
LED954	6-500-450-01	LED CL-195SR-CD-T (SOURCE)			
		< SWITCH >			
LSW901	1-771-476-11	SWITCH, KEY BOARD (WITH LED) (OFF)			
LSW904	1-771-476-11	SWITCH, KEY BOARD (WITH LED) (SEL)			
LSW905	1-771-476-11	SWITCH, KEY BOARD (WITH LED) (+ (VOLUME))			
LSW906	1-771-476-11	SWITCH, KEY BOARD (WITH LED) (– (VOLUME))			
LSW907	1-771-476-11	SWITCH, KEY BOARD (WITH LED) (ATT)			
LSW908	1-771-476-11	SWITCH, KEY BOARD (WITH LED) (MODE ◀I▶)			
LSW909	1-771-883-31	SWITCH, TACTILE (WITH LED) (AF)			
LSW910	1-771-883-31	SWITCH, TACTILE (WITH LED) (BTM/MTL, SENS)			
LSW912	1-771-476-11	SWITCH, KEY BOARD (WITH LED) (DSPL)			
LSW913	1-771-476-11	SWITCH, KEY BOARD (WITH LED) (+ ▶▶I ▶▶, SEEK)			
LSW914	1-771-476-11	SWITCH, KEY BOARD (WITH LED) (– I◀◀ ◀◀, SEEK)			
LSW915	1-771-883-31	SWITCH, TACTILE (WITH LED) (TA)			
LSW916	1-771-883-31	SWITCH, TACTILE (WITH LED) (LIST, PTY)			
LSW917	1-771-883-31	SWITCH, TACTILE (WITH LED) (6, ALBM +/ATA)			
LSW918	1-771-883-31	SWITCH, TACTILE (WITH LED) (5, BL SKIP/ALBM –)			
LSW919	1-771-883-31	SWITCH, TACTILE (WITH LED) (4, SHUF)			
LSW920	1-771-883-31	SWITCH, TACTILE (WITH LED) (3, REP)			
LSW921	1-771-883-31	SWITCH, TACTILE (WITH LED) (2, DISC +)			
LSW922	1-771-883-31	SWITCH, TACTILE (WITH LED) (1, DISC –)			
		< RESISTOR >			
R901	1-216-819-11	METAL CHIP	680	5%	1/10W
R902	1-216-819-11	METAL CHIP	680	5%	1/10W
R903	1-216-819-11	METAL CHIP	680	5%	1/10W
R904	1-216-821-11	METAL CHIP	1K	5%	1/10W
R905	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R906	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R907	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R908	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R909	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R910	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R911	1-216-819-11	METAL CHIP	680	5%	1/10W
R912	1-216-819-11	METAL CHIP	680	5%	1/10W
R913	1-216-819-11	METAL CHIP	680	5%	1/10W
R914	1-216-821-11	METAL CHIP	1K	5%	1/10W
R915	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R916	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R917	1-216-825-11	METAL CHIP	2.2K	5%	1/10W

KEY MAIN

Ref. No.	Part No.	Description			Remark
R918	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R919	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R920	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R921	1-216-833-11	METAL CHIP	10K	5%	1/10W
R927	1-216-025-11	RES-CHIP	100	5%	1/10W
R928	1-216-021-00	METAL CHIP	68	5%	1/10W
R929	1-216-017-00	RES-CHIP	47	5%	1/10W
R930	1-216-017-00	RES-CHIP	47	5%	1/10W
R931	1-216-041-11	RES-CHIP	470	5%	1/10W
R934	1-216-017-00	RES-CHIP	47	5%	1/10W
R935	1-216-025-11	RES-CHIP	100	5%	1/10W
R936	1-216-021-00	METAL CHIP	68	5%	1/10W
R941	1-216-025-11	RES-CHIP	100	5%	1/10W
R942	1-216-021-00	METAL CHIP	68	5%	1/10W
R946	1-216-025-11	RES-CHIP	100	5%	1/10W
R947	1-216-021-00	METAL CHIP	68	5%	1/10W
R950	1-216-025-11	RES-CHIP	100	5%	1/10W
R951	1-216-021-00	METAL CHIP	68	5%	1/10W
R960	1-216-025-00	RES-CHIP	100	5%	1/10W
R961	1-216-025-00	RES-CHIP	100	5%	1/10W
R962	1-216-029-00	RES-CHIP	150	5%	1/10W
R966	1-216-025-11	RES-CHIP	100	5%	1/10W
R967	1-216-037-00	METAL CHIP	330	5%	1/10W
R970	1-216-864-11	SHORT CHIP	0		
R971	1-216-821-11	METAL CHIP	1K	5%	1/10W
R972	1-216-809-11	METAL CHIP	100	5%	1/10W
R975	1-216-817-11	METAL CHIP	470	5%	1/10W
R976	1-216-817-11	METAL CHIP	470	5%	1/10W
R977	1-216-817-11	METAL CHIP	470	5%	1/10W
R978	1-216-817-11	METAL CHIP	470	5%	1/10W
R979	1-216-817-11	METAL CHIP	470	5%	1/10W
R980	1-216-817-11	METAL CHIP	470	5%	1/10W
R981	1-216-811-11	METAL CHIP	150	5%	1/10W
R982	1-216-811-11	METAL CHIP	150	5%	1/10W
R983	1-216-811-11	METAL CHIP	150	5%	1/10W
R985	1-216-864-11	SHORT CHIP	0		
R986	1-216-821-11	METAL CHIP	1K	5%	1/10W
R987	1-216-821-11	METAL CHIP	1K	5%	1/10W
R988	1-216-821-11	METAL CHIP	1K	5%	1/10W
R989	1-216-840-11	METAL CHIP	39K	5%	1/10W
R990	1-216-857-11	METAL CHIP	1M	5%	1/10W
		< SWITCH >			
S902	1-771-884-31	SWITCH, TACTILE (SOURCE)			
S903	1-771-884-31	SWITCH, TACTILE (DSO)			
S911	1-771-884-31	SWITCH, TACTILE (EQ3)			

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	A-3274-652-A	MAIN BOARD, COMPLETE			
		**********			
	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT			
	7-685-793-09	SCREW +PTT 2.6X8 (S)			
	7-685-795-09	SCREW +PTT 2.6X12 (S)			
		< CAPACITOR >			
C11	1-126-163-11	ELECT	4.7uF	20%	50V
C12	1-124-584-00	ELECT	100uF	20%	10V
C13	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C14	1-124-589-11	ELECT	47uF	20%	16V
C15	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C17	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C18	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C19	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C51	1-124-589-11	ELECT	47uF	20%	16V
C54	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C55	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C56	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C57	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C58	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C59	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C61	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C62	1-164-739-11	CERAMIC CHIP	560PF	5%	50V
C81	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C82	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C85	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C86	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C87	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C101	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C102	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C103	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C104	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C105	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C142	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C143	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C144	1-104-942-11	ELECT	1uF	20%	50V
C201	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C202	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C203	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C204	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C205	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C242	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C243	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C244	1-104-942-11	ELECT	1uF	20%	50V
C301	1-124-234-00	ELECT	22uF	20%	16V
C302	1-124-234-00	ELECT	22uF	20%	16V
C303	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C304	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C305	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C306	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C308	1-124-233-11	ELECT	10uF	20%	16V
C309	1-126-160-11	ELECT	1uF	20%	50V
C310	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C351	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C352	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C353	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C354	1-124-233-11	ELECT	10uF	20%	16V
C356	1-126-934-11	ELECT	220uF	20%	16V
C357	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C358	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C401	1-124-233-11	ELECT	10uF	20%	16V
C402	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C403	1-124-589-11	ELECT	47uF	20%	16V
C411	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C412	1-136-154-00	FILM	0.012uF	5%	50V
C413	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V

MAIN

Ref. No.	Part No.	Description			Remark
C421	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C422	1-136-154-00	FILM	0.012uF	5%	50V
C423	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C431	1-124-233-11	ELECT	10uF	20%	16V
C432	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C441	1-124-233-11	ELECT	10uF	20%	16V
C442	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C444	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C451	1-124-233-11	ELECT	10uF	20%	16V
C452	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C454	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C461	1-124-233-11	ELECT	10uF	20%	16V
C462	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C479	1-124-589-11	ELECT	47uF	20%	16V
C501	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C502	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C503	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C504	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C505	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C506	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C510	1-124-589-11	ELECT	47uF	20%	16V
C511	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C514	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C515	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C516	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C517	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C521	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C581	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C583	1-126-935-11	ELECT	470uF	20%	16V
C601	1-107-885-31	ELECT	3300uF	20%	16V
C602	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C609	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C617	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C618	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C619	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C621	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C622	1-125-710-11	DOUBLE LAYER	0.1F		5.5V
C623	1-124-584-00	ELECT	100uF	20%	10V
C631	1-124-257-00	ELECT	2.2uF	20%	50V
C710	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C711	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C712	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C713	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C715	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C716	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C717	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C718	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C751	1-124-234-00	ELECT	22uF	20%	16V
C752	1-124-257-00	ELECT	2.2uF	20%	50V
C753	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C754	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C755	1-124-233-11	ELECT	10uF	20%	16V
C756	1-124-233-11	ELECT	10uF	20%	16V
C757	1-124-233-11	ELECT	10uF	20%	16V
C758	1-124-233-11	ELECT	10uF	20%	16V
C759	1-124-584-00	ELECT	100uF	20%	10V
C762	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C763	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C764	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C765	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C766	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V

< CONNECTOR >

CN301	1-785-694-11	CONNECTOR, FFC/FPC 7P
CN351	1-784-490-11	CONNECTOR, FFC/FPC 11P
CN581	1-580-907-31	PLUG, CONNECTOR (BUS CONTROL IN)
CN701	1-784-456-11	CONNECTOR, FFC/FPC 14P
CNP601	1-774-701-21	PIN, CONNECTOR 16P

< DIODE >

D23	8-719-976-99	DIODE DTZ5.1B
D352	8-719-970-02	DIODE 1SR139-400
D479	8-719-404-50	DIODE MA111-TX
D581	8-719-056-82	DIODE UDZ-TE-17-6.2B
D582	8-719-056-93	DIODE UDZ-TE-17-18B
D584	8-719-056-93	DIODE UDZ-TE-17-18B
D585	8-719-072-70	DIODE MA2ZD14001S0
D586	8-719-056-93	DIODE UDZ-TE-17-18B
D601	8-719-049-38	DIODE 1N5404TU
D609	8-719-977-12	DIODE DTZ6.8B
D612	8-719-970-02	DIODE 1SR139-400
D613	8-719-970-02	DIODE 1SR139-400
D617	8-719-970-02	DIODE 1SR139-400
D618	8-719-970-02	DIODE 1SR139-400
D671	8-719-404-50	DIODE MA111-TX
D701	8-719-404-50	DIODE MA111-TX
D710	8-719-977-12	DIODE DTZ6.8B
D711	8-719-977-12	DIODE DTZ6.8B
D712	8-719-977-12	DIODE DTZ6.8B
D713	8-719-977-12	DIODE DTZ6.8B
D714	8-719-056-93	DIODE UDZ-TE-17-18B
D715	8-719-977-12	DIODE DTZ6.8B
D716	8-719-977-12	DIODE DTZ6.8B
D717	8-719-977-12	DIODE DTZ6.8B
D718	8-719-977-12	DIODE DTZ6.8B
D719	8-719-056-93	DIODE UDZ-TE-17-18B
D751	8-719-970-02	DIODE 1SR139-400
D752	8-719-970-02	DIODE 1SR139-400
D753	8-719-970-02	DIODE 1SR139-400
D754	8-719-970-02	DIODE 1SR139-400
D755	8-719-970-02	DIODE 1SR139-400
D756	8-719-970-02	DIODE 1SR139-400
D757	8-719-970-02	DIODE 1SR139-400
D758	8-719-970-02	DIODE 1SR139-400

< IC >

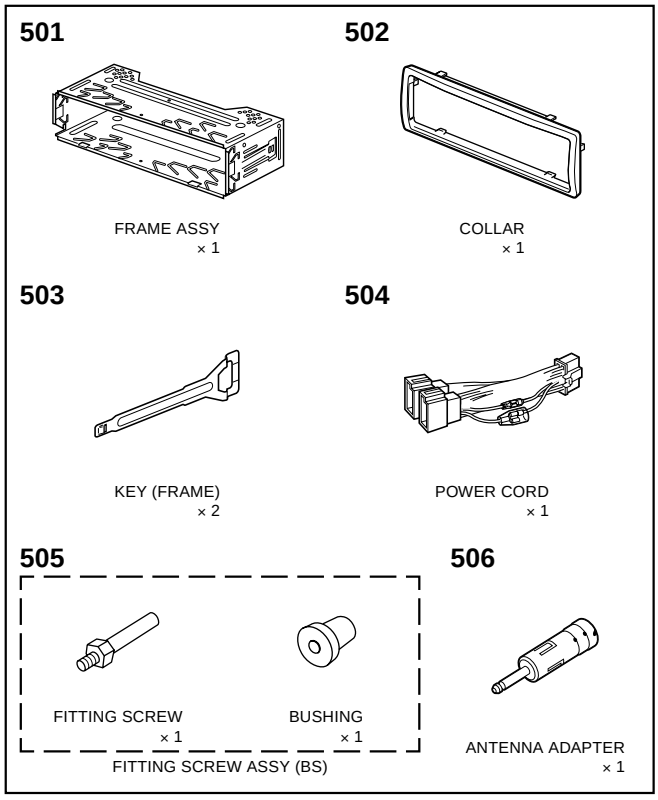
IC51	6-703-809-01	IC SAA6588T/V2-518
IC301	6-703-669-01	IC HA12231FP
IC351	8-759-527-33	IC LB1930M-TLM
IC401	6-703-304-01	IC BD3802F-FE2
IC501	6-802-514-01	IC MN101C49KSK
IC581	8-759-449-89	IC BA8270F-E2
IC602	8-759-682-69	IC XC61CN4302MR
IC751	6-703-375-11	IC TDA8588J/N1/M5

MAIN

Ref. No.	Part No.	Description			Remark
		< JACK >			
J10	1-815-185-12	JACK (ANT) (FM/MW/LW ANTENNA)			
J331	1-774-699-12	JACK, PIN 4P (BUS AUDIO IN, AUDIO OUT REAR)			
J671	1-566-822-41	JACK (REMOTE IN)			
		< SHORT >			
JC11	1-216-864-11	SHORT CHIP	0		
JC81	1-216-296-00	SHORT CHIP	0		
JC301	1-216-864-11	SHORT CHIP	0		
JC302	1-216-864-11	SHORT CHIP	0		
JC303	1-216-864-11	SHORT CHIP	0		
JC401	1-216-296-00	SHORT CHIP	0		
JC402	1-216-296-00	SHORT CHIP	0		
JC403	1-216-296-00	SHORT CHIP	0		
JC404	1-216-864-11	SHORT CHIP	0		
JC502	1-216-864-11	SHORT CHIP	0		
JC503	1-216-864-11	SHORT CHIP	0		
JC751	1-216-296-00	SHORT CHIP	0		
		< COIL >			
L11	1-469-844-11	INDUCTOR	2.2uH		
L12	1-469-844-11	INDUCTOR	2.2uH		
L500	1-419-476-11	COIL, CHOKE	250uH		
L501	1-410-750-41	INDUCTOR	0.47uH		
		< TRANSISTOR >			
Q22	1-801-806-11	TRANSISTOR	DTC144EKA		
Q301	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q353	8-729-900-53	TRANSISTOR	DTC114EK		
Q354	8-729-106-60	TRANSISTOR	2SB1115A		
Q431	8-729-920-21	TRANSISTOR	DTC314TK-T-146		
Q441	8-729-920-21	TRANSISTOR	DTC314TK-T-146		
Q451	8-729-920-21	TRANSISTOR	DTC314TK-T-146		
Q461	8-729-920-21	TRANSISTOR	DTC314TK-T-146		
Q478	1-801-806-11	TRANSISTOR	DTC144EKA		
Q479	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q581	8-729-900-53	TRANSISTOR	DTC114EK		
Q631	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q641	8-729-047-76	TRANSISTOR	FMC2A-T148		
Q651	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q664	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
		< RESISTOR >			
R11	1-216-809-11	METAL CHIP	100	5%	1/10W
R12	1-216-809-11	METAL CHIP	100	5%	1/10W
R29	1-247-807-31	CARBON	100	5%	1/4W
R51	1-216-864-11	SHORT CHIP	0		
R54	1-216-837-11	METAL CHIP	22K	5%	1/10W
R56	1-216-797-11	METAL CHIP	10	5%	1/10W
R57	1-216-817-11	METAL CHIP	470	5%	1/10W
R60	1-216-797-11	METAL CHIP	10	5%	1/10W
R61	1-216-864-11	SHORT CHIP	0		
R62	1-216-864-11	SHORT CHIP	0		
R103	1-216-833-11	METAL CHIP	10K	5%	1/10W
R104	1-216-835-11	METAL CHIP	15K	5%	1/10W
R105	1-216-838-11	METAL CHIP	27K	5%	1/10W
R141	1-216-833-11	METAL CHIP	10K	5%	1/10W
R142	1-216-821-11	METAL CHIP	1K	5%	1/10W
R203	1-216-833-11	METAL CHIP	10K	5%	1/10W
R204	1-216-835-11	METAL CHIP	15K	5%	1/10W
R205	1-216-838-11	METAL CHIP	27K	5%	1/10W
R241	1-216-833-11	METAL CHIP	10K	5%	1/10W
R242	1-216-821-11	METAL CHIP	1K	5%	1/10W
R301	1-216-851-11	METAL CHIP	330K	5%	1/10W
R302	1-216-835-11	METAL CHIP	15K	5%	1/10W
R303	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R304	1-249-393-11	CARBON	10	5%	1/4W
R352	1-249-383-11	CARBON	1.5	5%	1/4W
R353	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R354	1-216-833-11	METAL CHIP	10K	5%	1/10W
R401	1-218-882-11	METAL CHIP	30K	0.5%	1/10W
R402	1-216-809-11	METAL CHIP	100	5%	1/10W
R403	1-216-809-11	METAL CHIP	100	5%	1/10W
R404	1-249-393-11	CARBON	10	5%	1/4W
R411	1-216-833-11	METAL CHIP	10K	5%	1/10W
R412	1-216-833-11	METAL CHIP	10K	5%	1/10W
R421	1-216-833-11	METAL CHIP	10K	5%	1/10W
R422	1-216-833-11	METAL CHIP	10K	5%	1/10W
R431	1-216-809-11	METAL CHIP	100	5%	1/10W
R432	1-216-809-11	METAL CHIP	100	5%	1/10W
R433	1-216-841-11	METAL CHIP	47K	5%	1/10W
R434	1-216-821-11	METAL CHIP	1K	5%	1/10W
R441	1-216-809-11	METAL CHIP	100	5%	1/10W
R442	1-216-809-11	METAL CHIP	100	5%	1/10W
R443	1-216-841-11	METAL CHIP	47K	5%	1/10W
R444	1-216-821-11	METAL CHIP	1K	5%	1/10W
R451	1-216-809-11	METAL CHIP	100	5%	1/10W
R452	1-216-809-11	METAL CHIP	100	5%	1/10W
R453	1-216-841-11	METAL CHIP	47K	5%	1/10W
R454	1-216-821-11	METAL CHIP	1K	5%	1/10W
R461	1-216-809-11	METAL CHIP	100	5%	1/10W
R462	1-216-809-11	METAL CHIP	100	5%	1/10W
R463	1-216-841-11	METAL CHIP	47K	5%	1/10W
R464	1-216-821-11	METAL CHIP	1K	5%	1/10W
R479	1-216-805-11	METAL CHIP	47	5%	1/10W
R501	1-216-837-11	METAL CHIP	22K	5%	1/10W
R502	1-216-813-11	METAL CHIP	220	5%	1/10W
R503	1-216-845-11	METAL CHIP	100K	5%	1/10W
R504	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R505	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R506	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R507	1-216-841-11	METAL CHIP	47K	5%	1/10W
R508	1-216-845-11	METAL CHIP	100K	5%	1/10W
R509	1-216-813-11	METAL CHIP	220	5%	1/10W
R516	1-216-845-11	METAL CHIP	100K	5%	1/10W
R518	1-216-845-11	METAL CHIP	100K	5%	1/10W
R519	1-216-845-11	METAL CHIP	100K	5%	1/10W
R520	1-216-841-11	METAL CHIP	47K	5%	1/10W
R521	1-216-837-11	METAL CHIP	22K	5%	1/10W
R522	1-216-837-11	METAL CHIP	22K	5%	1/10W
R523	1-216-837-11	METAL CHIP	22K	5%	1/10W
R524	1-216-845-11	METAL CHIP	100K	5%	1/10W
R526	1-216-845-11	METAL CHIP	100K	5%	1/10W
R528	1-216-845-11	METAL CHIP	100K	5%	1/10W

MAIN | SUB

Ref. No.	Part No.	Description			Remark
R529	1-216-833-11	METAL CHIP	10K	5%	1/10W
R530	1-216-833-11	METAL CHIP	10K	5%	1/10W
R531	1-216-845-11	METAL CHIP	100K	5%	1/10W
R537	1-216-845-11	METAL CHIP	100K	5%	1/10W
R538	1-216-845-11	METAL CHIP	100K	5%	1/10W
R539	1-216-845-11	METAL CHIP	100K	5%	1/10W
R540	1-216-845-11	METAL CHIP	100K	5%	1/10W
R541	1-216-845-11	METAL CHIP	100K	5%	1/10W
R542	1-216-845-11	METAL CHIP	100K	5%	1/10W
R543	1-216-845-11	METAL CHIP	100K	5%	1/10W
R544	1-216-809-11	METAL CHIP	100	5%	1/10W
R546	1-216-864-11	SHORT CHIP	0		
R547	1-216-864-11	SHORT CHIP	0		
R550	1-216-833-11	METAL CHIP	10K	5%	1/10W
R551	1-216-864-11	SHORT CHIP	0		
R552	1-216-845-11	METAL CHIP	100K	5%	1/10W
R553	1-216-845-11	METAL CHIP	100K	5%	1/10W
R554	1-249-433-11	CARBON	22K	5%	1/4W
R581	1-249-431-11	CARBON	15K	5%	1/4W
R582	1-249-417-11	CARBON	1K	5%	1/4W
R583	1-216-809-11	METAL CHIP	100	5%	1/10W
R584	1-216-809-11	METAL CHIP	100	5%	1/10W
R586	1-216-864-11	SHORT CHIP	0		
R609	1-249-417-11	CARBON	1K	5%	1/4W
R621	1-216-845-11	METAL CHIP	100K	5%	1/10W
R631	1-249-425-11	CARBON	4.7K	5%	1/4W
R632	1-216-841-11	METAL CHIP	47K	5%	1/10W
R633	1-216-841-11	METAL CHIP	47K	5%	1/10W
R634	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R636	1-216-845-11	METAL CHIP	100K	5%	1/10W
R641	1-249-417-11	CARBON	1K	5%	1/4W
R642	1-249-417-11	CARBON	1K	5%	1/4W
R651	1-249-417-11	CARBON	1K	5%	1/4W
R652	1-216-841-11	METAL CHIP	47K	5%	1/10W
R653	1-216-833-11	METAL CHIP	10K	5%	1/10W
R654	1-216-833-11	METAL CHIP	10K	5%	1/10W
R671	1-216-809-11	METAL CHIP	100	5%	1/10W
R672	1-247-807-31	CARBON	100	5%	1/4W
R673	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R674	1-216-849-11	METAL CHIP	220K	5%	1/10W
R701	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R702	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R710	1-216-809-11	METAL CHIP	100	5%	1/10W
R711	1-216-809-11	METAL CHIP	100	5%	1/10W
R713	1-216-809-11	METAL CHIP	100	5%	1/10W
R715	1-247-807-31	CARBON	100	5%	1/4W
R716	1-216-809-11	METAL CHIP	100	5%	1/10W
R717	1-216-809-11	METAL CHIP	100	5%	1/10W
R718	1-216-809-11	METAL CHIP	100	5%	1/10W
R751	1-216-841-11	METAL CHIP	47K	5%	1/10W
R752	1-216-809-11	METAL CHIP	100	5%	1/10W
		< SWITCH >			
S502	1-786-458-11	SWITCH, PUSH (1 KEY) (NOSE DETECT)			
S702	1-692-431-21	SWITCH, TACTILE (RESET)			

Ref. No.	Part No.	Description	Remark
		< THERMISTOR >	
TH501	1-803-350-21	THERMISTOR, POSITIVE	
		< TUNER >	
TU1	A-3220-887-A	TUNER UNIT (TUX-030//Q)	
		< VIBRATOR >	
X51	1-579-242-41	VIBRATOR, CRYSTAL (4.332MHz)	
X501	1-781-294-21	VIBRATOR, CRYSTAL (18.432MHz)	
X502	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)	
**********			
	1-687-316-11	SUB BOARD **********	
		< CONNECTOR >	
CN801	1-817-159-11	SOCKET, CONNECTOR 14P	
		< SWITCH >	
LSW801	1-771-883-31	SWITCH, TACTILE (WITH LED) (⏏)	
**********			
		MISCELLANEOUS **********	
2	1-792-195-11	CABLE, FLEXIBLE FLAT (14CORE)	
20	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER)	
56	1-694-989-11	CONDUCTIVE BOARD, CONNECTION	
FU601	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A/32V)	
HP901	1-500-196-31	HEAD, MAGNETIC (PLAYBACK)	
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)	
**********			
		ACCESSORIES **********	
	3-247-837-31	MANUAL, INSTRUCTION (ENGLISH, GERMAN, FRENCH, ITALIAN, DUTCH)	
	3-247-838-31	MANUAL, INSTRUCTION INSTALL (ENGLISH, GERMAN, FRENCH, ITALIAN, DUTCH)	
**********			

Ref. No.	Part No.	Description	Remark
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
501	X-3382-647-1	FRAME ASSY, FITTING	
502	3-246-443-01	COLLAR	
503	3-246-471-01	KEY (FRAME)	
504	1-776-527-61	CORD (WITH CONNECTOR) (ISO) (POWER)	
505	X-3382-926-1	SCREW ASSY (BS), FITTING	
506	1-465-459-21	ADAPTER, ANTENNA